

LINCOLN CITY/LANCASTER COUNTY PLANNING STAFF REPORT

for May 25, 2005 PLANNING COMMISSION MEETING

P.A.S.: Four Stones Community Unit Plan **REVISED**
Co. Special Permit #04055, Preliminary Plat #04025

Note: This is a combined staff report for related items. This report contains a single background and analysis section for all items. However, there are separate conditions provided for each individual application.

PROPOSAL: A community unit plan and preliminary plat for fourteen acreage residential units with four outlots (previously 31 lots).

LOCATION: In the mile section bounded by SW 14th Street to SW 29th and W. Stagecoach Road to W. Panama Road.

WAIVER REQUESTS:

1. Ornamental street lighting.
2. Sidewalks.
3. Street trees.
4. Landscape screens.
5. Stormwater Detention.
6. Block length.

LAND AREA: 240.87 acres, more or less (previously 520.26 acres).

CONCLUSION: This is an AG Community Unit Plan, proposing to “cluster” the allowed dwelling units to 14 acreage lots. Waivers requested are typical of a rural subdivision and are provided for in the code. A 20% bonus is being requested for farmland and floodplain protection.

RECOMMENDATION:

Co. Special Permit #04055
Preliminary Plat # 04025

Conditional Approval
Conditional Approval

Waivers

- | | |
|-------------------------|----------|
| 1. Ornamental lighting | Approval |
| 2. Sidewalks | Approval |
| 3. Street trees | Approval |
| 4. Landscape screens | Approval |
| 5. Stormwater Detention | Approval |
| 6. Block length | Approval |

GENERAL INFORMATION

LEGAL DESCRIPTION: A 240.867 acre tract of land located in Section 4, T7N, R6E of the 6th P.M., Lancaster County, Nebraska. See attached legal description.

EXISTING ZONING: AG Agriculture and a small portion in Sprague's one mile.

EXISTING LAND USE: Farm land/pasture

SURROUNDING LAND USE AND ZONING: Agricultural land in AG zoning on all sides. Scattered farm houses. Contracting firm on the south. Village of Sprague one mile north on SW 14th St. Several houses and excavation site in the area.

HISTORY: This application was put on pending at the Planning Commission at the October 27, 2004 meeting in order to allow the applicant to work with the neighbors and the County Engineer. Changed from AA Rural and Public Use to AG Agriculture with the adoption of the 1979 Zoning Update.

COMPREHENSIVE PLAN SPECIFICATIONS: The 2025 Comprehensive Plan shows this area as Agriculture, Agricultural Stream Corridor and Environmental Resources. This is outside the Lincoln growth tiers. A cluster is permitted by special permit in the AG district. In relation to clustering the Comprehensive Plan states:

Currently, acreage development has occurred under two development scenarios: AG - Agricultural District (minimum of 20 acres per lot) and AGR - Agricultural Residential District (minimum of 3 acres per lot) with the possibility in both AG and AGR zoning districts of clustering units together in order to preserve more open space and agricultural areas and/or receive additional density bonuses under a community unit development. The complex issue of acreage development and other public objectives requires a large array of land use strategies (pg F 70)

Acknowledge the "Right to Farm" and preserve areas for agricultural productions throughout the county by designating specific areas in advance for rural residential so as to limit areas of potential conflict between farms and acreages (pg F 70)

Retain the current overall density of 32 dwellings per square mile (20 acre) for all agriculturally zoned land. Provide for an ability to divide two 3 acre lots per "40" acre parcel with conditions and administrative review and right of appeal. This would allow more flexibility for parcel size while retaining the overall density and assist in retaining farmable units of land. (F 70)

In determining areas of higher density rural acreage (200 units or more per square mile), numerous factors will be reviewed, such as but not limited to water and rural water districts, soil conditions, roads, agricultural productivity, land parcelization, amount of existing acreages, and plans for urban or town development. Acreages should develop in areas that best reflect the carrying capacity of that area for acreages. A performance criteria should be developed to review requests for acreage zoning and to determine where these standards can best be met. (F 70)

Development of a performance standard "point system" will allow the location of higher density rural acreage development in either "AG" or "AGR" where the review criteria can be met. This allows equal treatment across the county, maximum freedom of determination of marketing and sale, while locating those developments only in those areas where sufficient "points" can be accumulated to justify the development at the requested location." (F 71)

Environmental Resources: Land and water masses which are of particular importance for maintenance and preservation, such as saline wetlands, native prairie, and some floodway and riparian corridors. Such areas may be either publicly or privately owned.

Agricultural Stream Corridor: Land intended to remain in open space, predominately in agricultural use, but that may also include parks, recreation fields, or parking areas when near future commercial, industrial, or public uses. Such areas will be primarily privately owned, but may also include some public ownership or easements. These areas are mostly in the 100 year floodplain, outside of the existing Lincoln urban development. (F 22)

Riparian, Floodplains, and Stream Corridors – Streams and their adjoining corridors snake their way through much of Lancaster County. Throughout the region, surface water runoff flows into these stream corridors that typically consist of floodplains and riparian areas. These are instrumental in providing habitat and water infiltration benefits, along with serving as connectors to natural areas. (F55)

UTILITIES: This is on the edge of the Lancaster County Rural Water District #1. Individual waste water treatment and well water is proposed. The groundwater report shows adequate quantity and quality.

TOPOGRAPHY: The property is rolling, draining to the northwest.

TRAFFIC ANALYSIS: W. Stagecoach Road, W. Panama Road, S.W. 29th Street and S.W. 14th Street are gravel county roads. None are shown for future improvement.

PUBLIC SERVICE: This area is served by Hallam Rural Fire District. This is in the Norris School District # 160. This is in the Norris Public Power service area.

REGIONAL ISSUES: Expansion of the acreage areas. Clustering to preserve farm land and floodplain. Increased traffic on selected roads.

ENVIRONMENTAL CONCERNS: The Historic and Ecological Resources survey shows two inactive gravel pits on this property. Blue Stem Lake is located one and one quarter miles northwest of this application. The soil rating is 4.87 on a scale of 1 to 10 where 1-4 are prime ag land. This is good but not prime land.

AESTHETIC CONSIDERATIONS: na

ALTERNATIVE USES: All uses allowed in the AG district. Twelve 20+ acre lots.

ANALYSIS:

1. This request is for a Special Permit for a Community Unit Plan for 14 acreage residential lots. Crushed rock public streets are proposed and individual sewer and water is proposed. A 20% dwelling unit bonus is being requested for preservation of the farm land and flood plain. This was previously heard by the Planning Commission on October 27, 2004. At that time the proposal was for 31 lots on 520 acres. Several continued deferrals by the applicants engineer and revisions to reflect the prior staff report, neighbors and the County Engineers concerns, have resulted in the current revised proposal.
2. These are typical cluster acreage lots in the three plus acre size range.
3. This request is in general conformance with the Comprehensive Plan.
4. The Performance Standard score is not provided, as requested by the County Board.
5. The density calculations for the project are as follows;

240.867 acres at 1 dwelling per 20 acres	=	12.0 dwellings
20% bonus requested X 1.20	=	14.45 dwellings
		14 dwellings permitted
Requested		14 units on 14 lots
6. There were no conflicting farm uses, such as feedlots, noted in the immediate area.
7. This reflects the normal adjustments to accomplish a cluster style of subdivision through the CUP.
8. Waivers are requested for street lights, sidewalks, block length, street trees, storm drainage and screening. These are typical waivers required, provided for and appropriate for agriculture/acreage clusters. Yards are adjusted from AG to AGR standards as part of the cluster.
9. The County Engineer's memo of April 25, 2005 indicates several issues and corrections that need to be corrected or made.
10. The Lincoln/Lancaster County Health Department notes the water report shows adequate water and lots sufficient in size for waste disposal. Test wells should be drilled before construction of a home.

11. Norris Public Power requests easements be shown.
12. A small portion of a street in this application is in the Sprague jurisdiction and will require approval of the plat by Sprague. The street dedication will include Sprague's jurisdiction.

CONDITIONS FOR SPECIAL PERMIT #04055:

Site Specific:

1. After the applicant completes the following instructions and submits the documents and plans to the Planning Department office and the plans are found to be acceptable, the application will be scheduled on the County Board's agenda: (NOTE: These documents and plans are required by resolution/ordinance or design standards.)
 - 1.1 Make the corrections requested by the County Engineer in his letter of April 25, 2005.
 - 1.2 Remove Note # 14 regarding county maintenance of the road.
 - 1.3 Revise the street name of Red Fox to a numbered street that meets the county standard.
 - 1.4 Show the uses of the Outlots.
 - 1.5 Revise Note #9 regarding topo elevations to include flood and opening elevations.
 - 1.6 Sheet 3 of 5 should be changed to reference street grades, not paving.
 - 1.7 Show the easements requested by Norris Public Power.
 - 1.8 Complete a subdivision permit for the existing farmstead split on S.W. 29th Street prior to approval of final platting.
 - 1.9 All streets must have a prefix of Southwest or West.
 - 1.10 Revise the signature blocks to show the correct year.
 - 1.11 Show all streets as private streets on an outlot if a bonus is being requested strictly for farm preservation or note the bonus is for preservation of environmental resources and floodplain as well as farming.
 - 1.12 Provide an updated certificate of ownership.

2. This approval permits 14 single family lots.

General:

3. Before receiving building permits:
 - 3.1 The permittee is to submit a revised site plan and the plan is found to be acceptable.
 - 3.2 The permittee is to submit six prints and a permanent reproducible final site plan as approved by the County Board.
 - 3.3 The construction plans are to comply with the approved plans.
 - 3.4 The final plat(s) is/are approved by the County Board.
 - 3.5 The County Board approves associated requests:
 - 3.5.1 Four Stone Preliminary Plat #04025.
 - 3.5.2 A waiver to the sidewalk, street lights, landscape screen, stormwater detention and street tree requirements since the area is of larger lots, a rural nature and the subdivision will not be annexed.
 - 3.5.3 A modification to lot area, frontage and setbacks as part of the CUP.
 - 3.5.4 A modification to the requirements of the land subdivision resolution to permit a block length in excess of 1320' along the north, south, east and west perimeter of this subdivision.
 - 3.6 The County Engineer has approved:
 - 3.6.1 An agreement for street maintenance.

STANDARD CONDITIONS:

4. The following conditions are applicable to all requests:
 - 4.1 Before occupying this Community Unit Plan all development and construction is to comply with the approved plans.
 - 4.2 Before occupying this Community Unit Plan, City/County Health Department is to approve the water and waste water systems.

- 4.3 All privately-owned improvements are to be permanently maintained by the owner or an appropriately established homeowners association approved by the County Attorney.
- 4.4 The site plan accompanying this permit shall be the basis for all interpretations of setbacks, yards, locations of buildings, location of parking and circulation elements, and similar matters.
- 4.5 This resolution's terms, conditions, and requirements bind and obligate the permittee, its successors and assigns.
- 4.6 The County Clerk is to file a copy of the resolution approving the permit and the letter of acceptance with the Register of Deeds. The Permittee is to pay the recording fee.

CONDITIONS FOR PRELIMINARY PLAT #04025:

Site Specific:

- 1. After the subdivider completes the following instructions and submits the documents and plans to the Planning Department office, the preliminary plat will be scheduled on the County Board agenda: (NOTE: These documents and plans are required by ordinance or design standards.)
 - 1.1 Make the corrections requested by the County Engineer in his letter of April 25, 2005.
 - 1.2 Remove Note # 14 regarding county maintenance of the road.
 - 1.3 Revise the street name of Red Fox to a numbered street that meets the county standard.
 - 1.4 Show the uses of the Outlots.
 - 1.5 Revise Note #9 regarding topo elevations to include flood and opening elevations.
 - 1.6 Sheet 3 of 5 should be changed to reference street grades, not paving.
 - 1.7 Show the easements requested by Norris Public Power.
 - 1.8 Complete a subdivision permit for the existing farmstead split on S.W. 29th Street prior to approval of final platting.

- 1.9 All streets must have a prefix of Southwest or West.
 - 1.10 Revise the signature blocks to show the correct year.
 - 1.11 Show all streets as private streets on an outlot if a bonus is being requested strictly for farm preservation or note the bonus is for preservation of environmental resources and floodplain as well as farming.
2. The County Board approves associated requests:
- 2.1 County Special Permit # 04055 for the Community Unit Plan.
 - 2.2 A waiver to the storm water detention, sidewalk, street paving, street lights, landscape screen, and street tree requirements since the area is of larger lots, a rural nature and the subdivision will not be annexed.
 - 2.3 A waiver to the lot area, setbacks and frontage.
 - 2.4 A modification to the requirements of the land subdivision ordinance to permit a block length in excess of 1320' along the north, south, east and west perimeter of this subdivision.

General:

3. Final Plats will be scheduled on the Planning Commission agenda after:
- 3.1 Streets, water facilities if rural water, drainage facilities, temporary turnarounds and barricades, and street name signs have been completed.
 - 3.2 The subdivider has signed an agreement that binds the subdivider, its successors and assigns:
 - 3.2.1 To submit to the County Engineer an erosion control plan.
 - 3.2.2 To protect the remaining trees on the site during construction and development.
 - 3.2.3 To submit to lot buyers and home builders a copy of the soil analysis and water report.
 - 3.2.4 To complete the private improvements shown on the preliminary plat.
 - 3.2.5 To maintain the outlots and private improvements on a permanent and continuous basis. However, the subdivider may be relieved and

discharged of this maintenance obligation upon creating in writing a permanent and continuous association of property owners who would be responsible for said permanent and continuous maintenance. The subdivider shall not be relieved of such maintenance obligation until the document or documents creating said property owners association have been reviewed and approved by the County Attorney and filed of record with the Register of Deeds.

- 3.2.6 To relinquish the right of direct vehicular access to S.W. 29th Street except for shown farm access and West Fresh Water Lane. To relinquish the right of direct access to W. Stagecoach Road except shown farm access and Red Fox Lane (as renumbered).
- 3.2.7 To comply with the provisions of the Land Subdivision Resolution regarding land preparation.

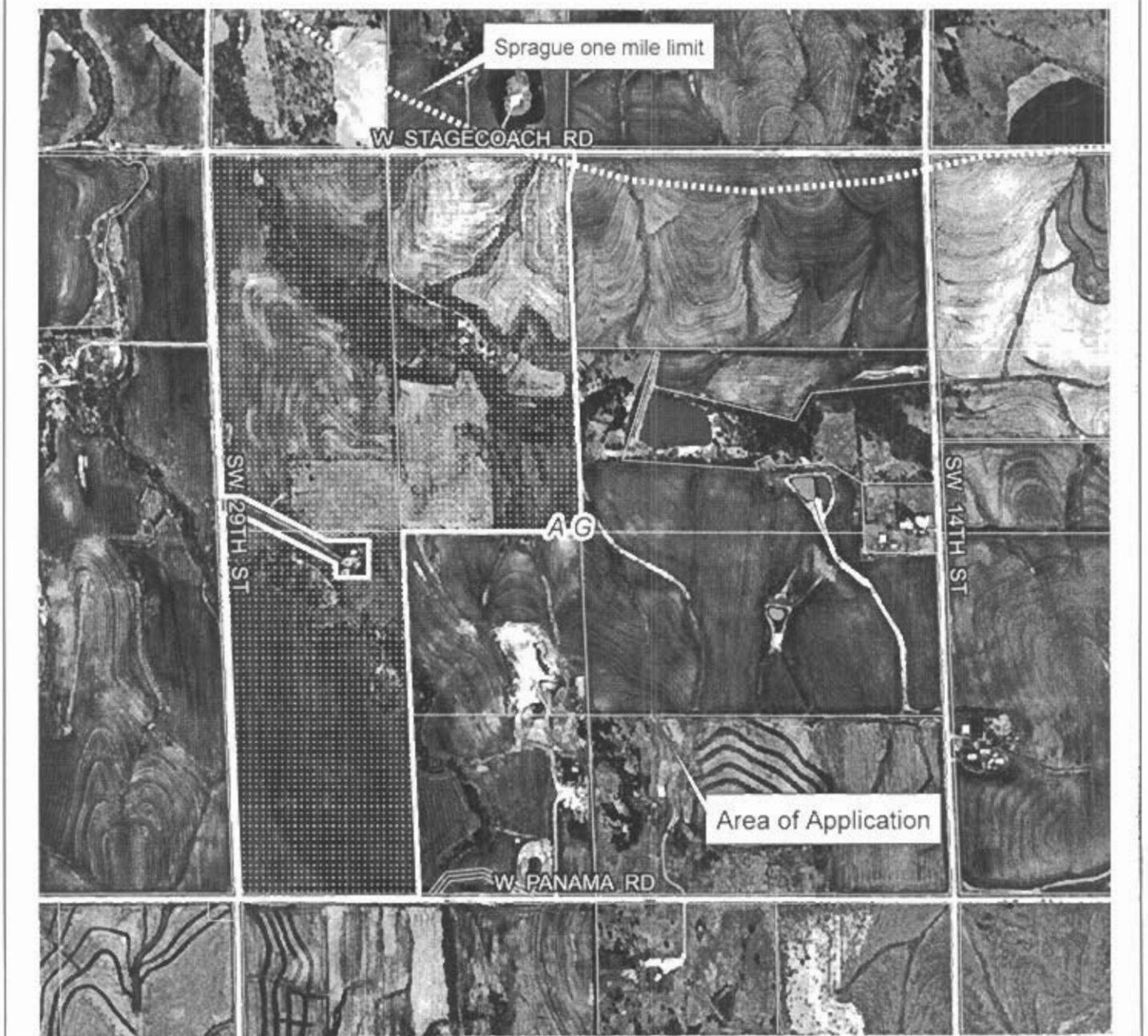
Prepared by:

Mike DeKalb, 441-6370, mdekalb@lincoln.ne.gov
Planner
October 9, 2004
Revised May 16, 2005

APPLICANT: Craig Gana
2200 W. Panama Road
Martell, NE 68404
402-794-0220

OWNERS: Craig A. Gana and Lori A Gana, husband and wife
and
Paul Walter Gana and Sharon Kaye Gana, husband and wife

CONTACT: Matt Langston
ESP
601 Old Cheney Road, Suite A
Lincoln, NE 68512
402 - 421 - 2500



2002 aerial

County Preliminary Plat #04025

County Special Permit #04055

Four Stones *Revised 5-10-05*

SW 29th & Stagecoach

Zoning:

One Square Mile

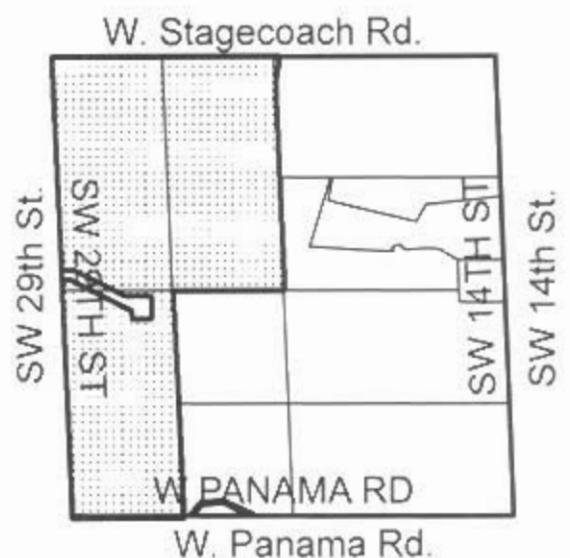
Sec. 04 T07N R06E

- R-1 to R-8 Residential District
- AG Agricultural District
- AGR Agricultural Residential District
- R-C Residential Conservation District
- O-1 Office District
- O-2 Suburban Office District
- O-3 Office Park District
- R-T Residential Transition District
- B-1 Local Business District
- B-2 Planned Neighborhood Business District
- B-3 Commercial District
- B-4 Lincoln Center Business District
- B-5 Planned Regional Business District
- H-1 Interstate Commercial District
- H-2 Highway Business District
- H-3 Highway Commercial District
- H-4 General Commercial District
- I-1 Industrial District
- I-2 Industrial Park District
- I-3 Employment Center District
- P Public Use District

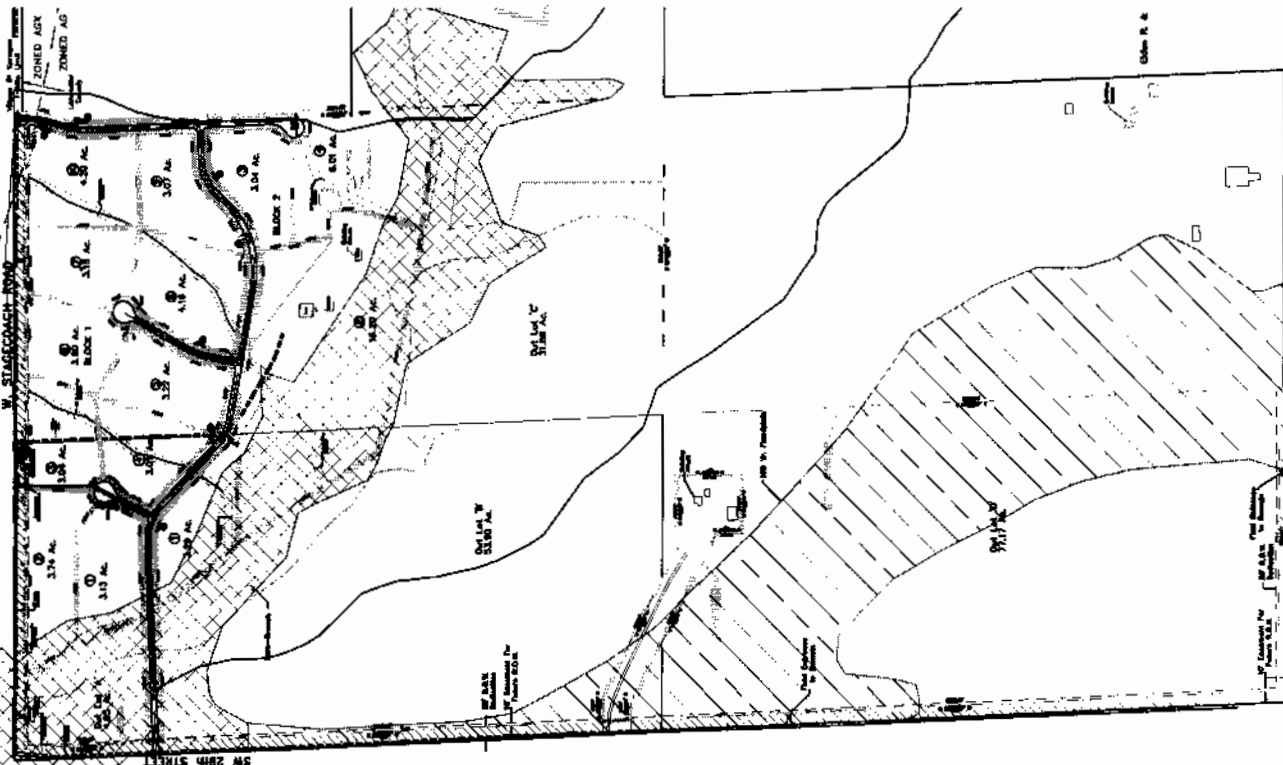


Zoning Jurisdiction Lines

City Limit Jurisdiction



Lincoln City - Lancaster County Planning De



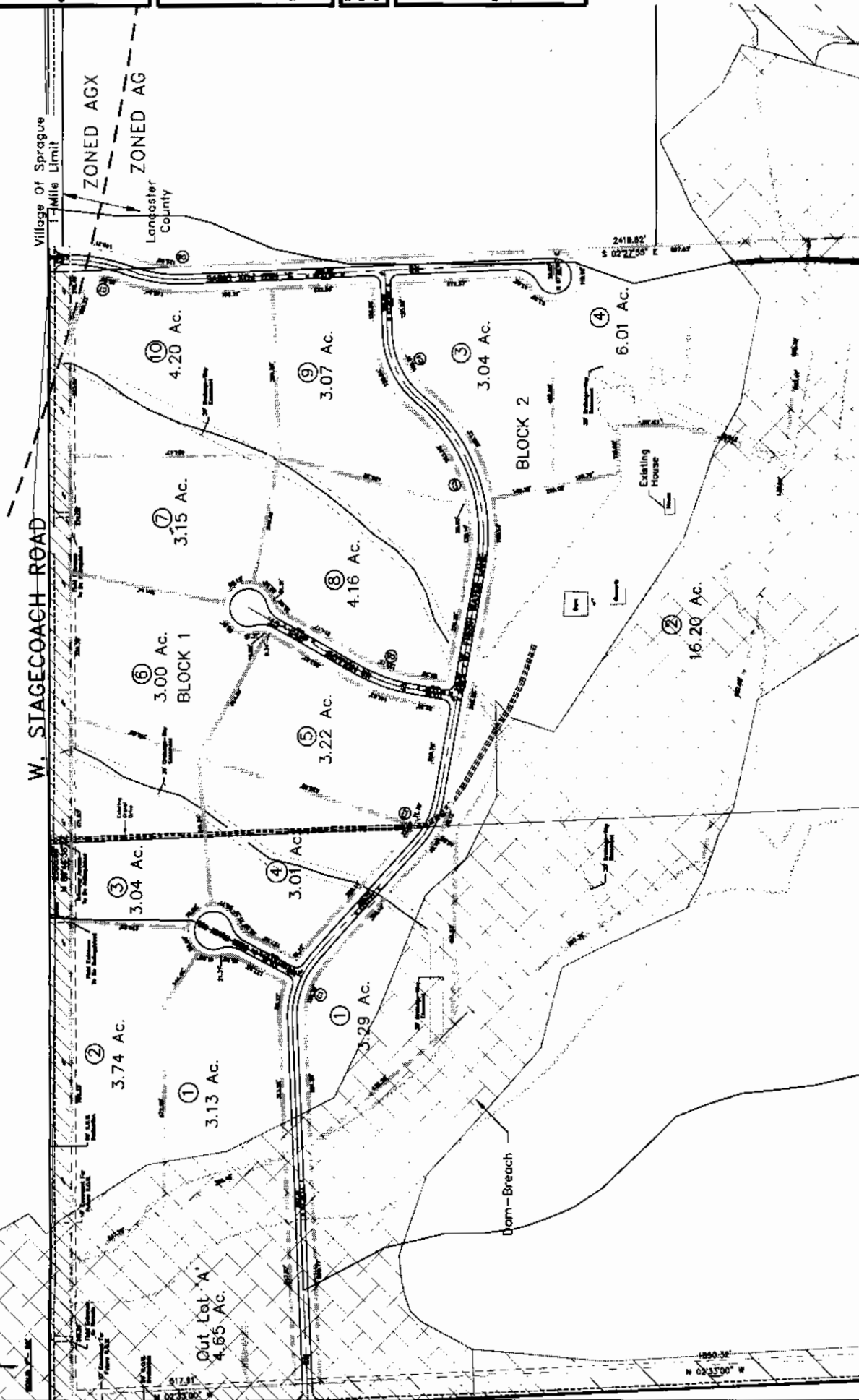
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County Preliminary Plat #04025
County Special Permit #04055
Four Stones
SW 29th & Stagecoach

GRAPHIC SCALE
0 5 10 15 20 25

Revised 5-16-05



County Preliminary Plat #04025
County Special Permit #04055

Four Stones

SW 29th & Stagecoach

Revised - 5-16-05

E.S.P.
CONSULTING
ENGINEERS

601 OLD
CHENEY RD.
SUITE 'A'
LINCOLN
NEBRASKA
68512

FOUR
STONES

SW 29th
STREET &
FOURTH
STADIUM
ROAD
MARTIN
NEBRASKA

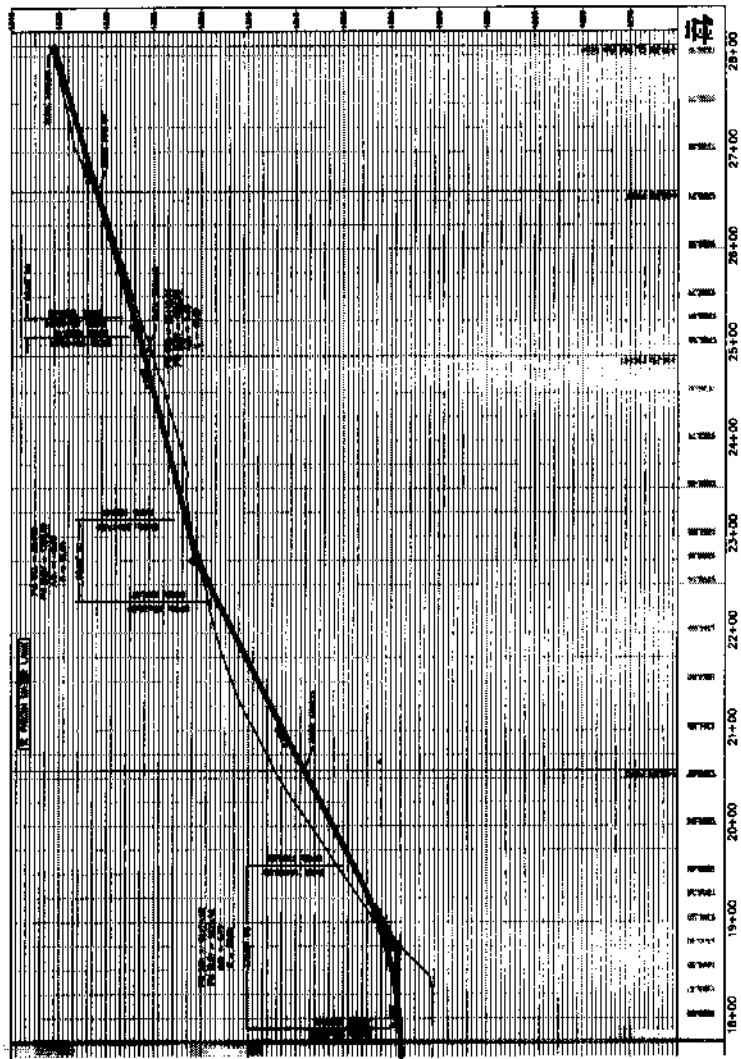
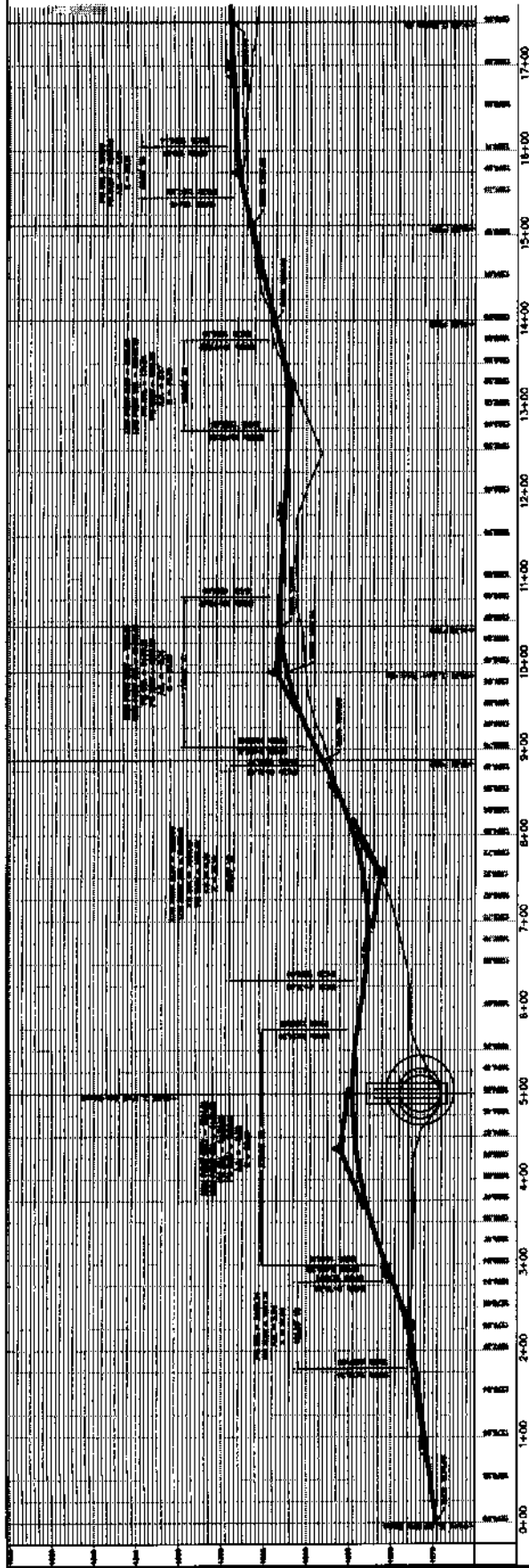
Project No.
Date
App.

PAVING
PROFILES

Scale: 1" = 10'
Date: 12/12/04

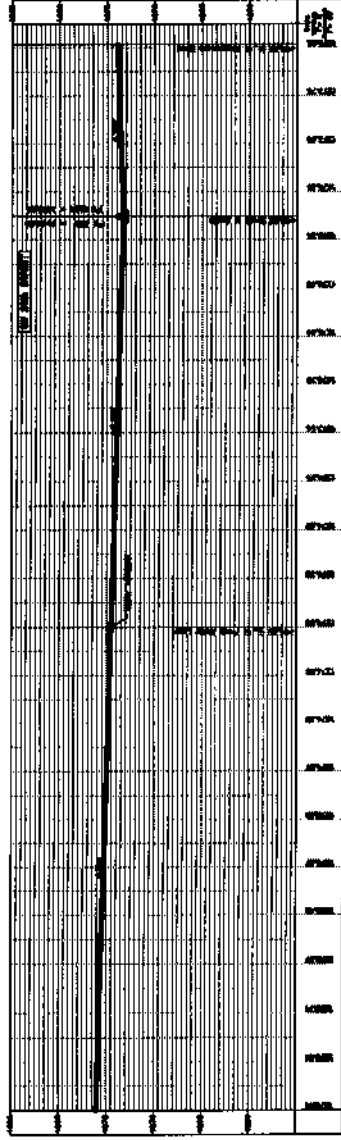
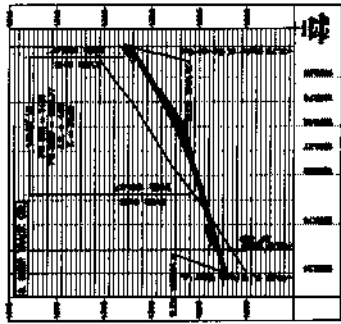
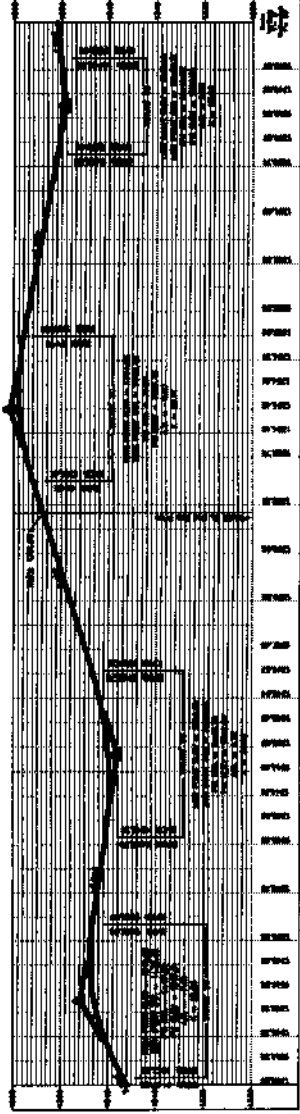
Revision

3 of 5

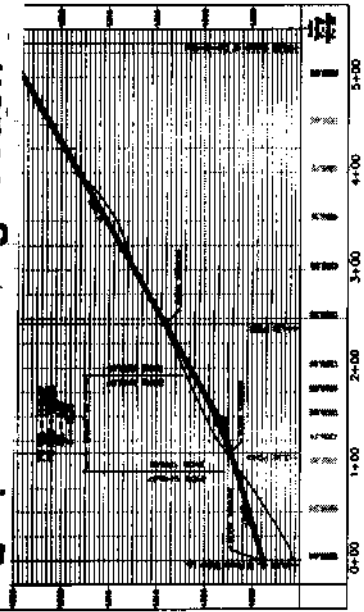
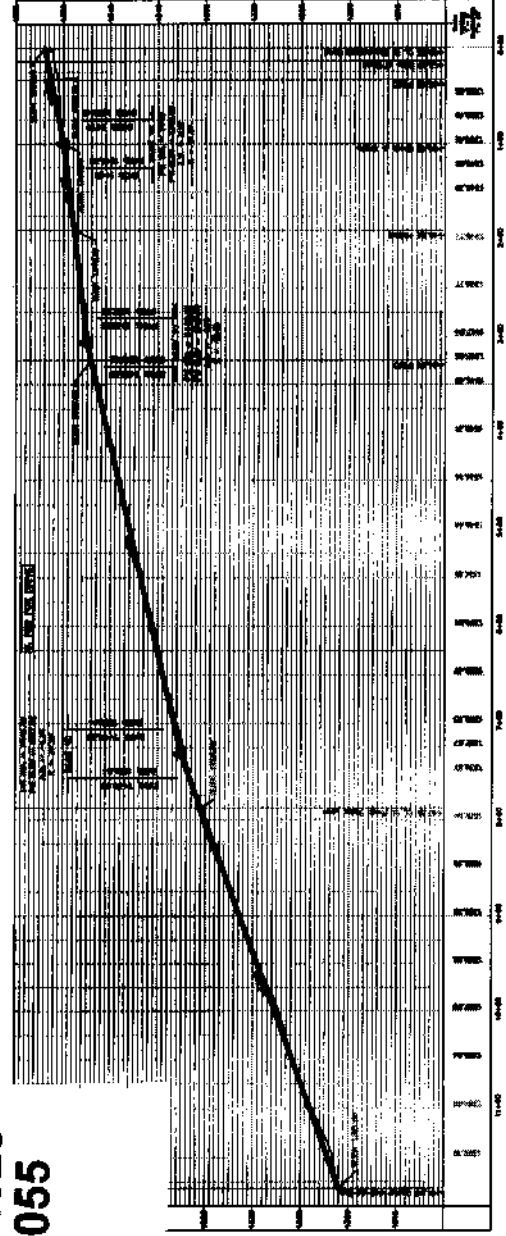


County Preliminary Plat #04025
County Special Permit #04055
Four Stones
SW 29th & Stagecoach

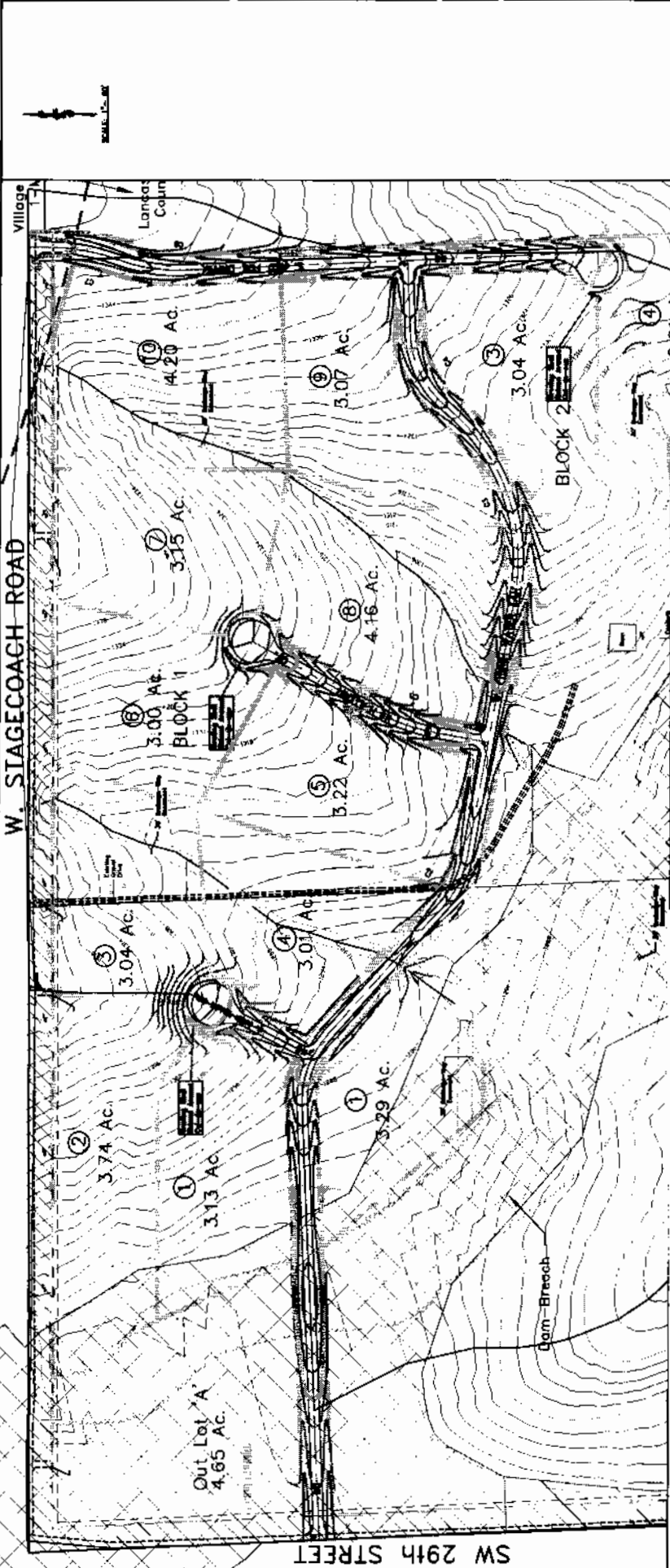
Revised 5-16-05



County Preliminary Plat #04025
County Special Permit #04055
Four Stones
SW 29th & Stagecoach



Revised 5-16-05



County Preliminary Plat #04025
 County Special Permit #04055
 Four Stones
 SW 29th & Stagecoach

Project: Four Stones
 Location: S.W. 29th Street & Stagecoach Rd., Lincoln, NE
 Submittal: 10/12/04
 Comments: See Note

Area	Acres	Area	Acres	Area	Acres	Area	Acres	Area	Acres
1	3.04	2	3.07	3	3.22	4	3.29	5	3.74
6	4.16	7	4.20	8	4.65	9	5.00	10	5.00
11	5.00	12	5.00	13	5.00	14	5.00	15	5.00
16	5.00	17	5.00	18	5.00	19	5.00	20	5.00
21	5.00	22	5.00	23	5.00	24	5.00	25	5.00
26	5.00	27	5.00	28	5.00	29	5.00	30	5.00
31	5.00	32	5.00	33	5.00	34	5.00	35	5.00
36	5.00	37	5.00	38	5.00	39	5.00	40	5.00
41	5.00	42	5.00	43	5.00	44	5.00	45	5.00
46	5.00	47	5.00	48	5.00	49	5.00	50	5.00
51	5.00	52	5.00	53	5.00	54	5.00	55	5.00
56	5.00	57	5.00	58	5.00	59	5.00	60	5.00
61	5.00	62	5.00	63	5.00	64	5.00	65	5.00
66	5.00	67	5.00	68	5.00	69	5.00	70	5.00
71	5.00	72	5.00	73	5.00	74	5.00	75	5.00
76	5.00	77	5.00	78	5.00	79	5.00	80	5.00
81	5.00	82	5.00	83	5.00	84	5.00	85	5.00
86	5.00	87	5.00	88	5.00	89	5.00	90	5.00
91	5.00	92	5.00	93	5.00	94	5.00	95	5.00
96	5.00	97	5.00	98	5.00	99	5.00	100	5.00

Note: All areas shown are for informational purposes only. The actual area of the property shall be determined by a survey of record.

Revised 5-16-05

GENERAL NOTES

1. This Preliminary Plat/C.U.P. Contains 240.87 Acres More Or Less.
2. This Preliminary Plat/C.U.P. Permits 14 Single Family Lots and 4 Outlots. Each Contain A Maximum Of One Single Family Residence And Out Buildings, All Located Within The Building Envelopes As Per Lancaster County Zoning Ordinances As Pertaining To AGR Standards.
3. The Current Zoning Is 'AG' And 'AGX' & The Proposed Zoning Is 'AG' With C.U.P. With 20% Density Bonus For Farm Land Preservation.
4. The Maximum Building Height Shall Not Exceed 35' As Per 'AG' Zoning.
5. The Developer/ Or Owner Reserves The Right To Build Anywhere Within The Building Envelopes.
6. The Developer Proposes The Use Of Individual Water Wells For Potable Water Supply.
7. The Developer Proposes The Use Of Individual Waste Water Systems. If Percolation Test Do Not Permit Subsurface Fields, Lagoons Shall Be Installed. Waste Water Systems Shall Be Approved By The Lancaster County Health Department.
8. All Curvilinear Dimensions Are Chord Lengths, Unless Noted Otherwise.
9. All Topographic Contours Are NAVD 88 Datum.
10. Direct Vehicular Access To W. Stagecoach Road, SW 29th Street, and W. Panama Road Is Hereby Relinquished Except At Field Accesses Required For Continued Agricultural Purposes, As Shown On Plan, and Access To: SW 29th Street At W. Fresh Water Lane and W. Stagecoach Road At Red Fox Drive.
11. The Following Waivers Are Approved With This Preliminary Plat: Sidewalks, Street Trees, Street Lighting, Street Paving, Storm Water Detention, Block Length, And Landscape Screening.
12. Future Lot Owners Will Be Advised That This Is In A Rural Farm Area And That Normal And Customary Farm Activities Are Not A Nuisance.
13. Farm Accesses Are For Agricultural Uses Only. Any Other Use Will Forfeit And Relinquish That Access.
14. The Subdivider Shall Be Requesting County Maintenance Of The Roads Within The Subdivision Following Completion Of The Roads To The County's Maintenance Standards.
15. All Improvements And Surfacing Shall Meet Lancaster County Standards.
16. All Outlots Shall be Utilized For Continued Agricultural Purposes.

County Preliminary Plat #04025
County Special Permit #04055
Four Stones
SW 29th & Stagecoach

Revised 5-11-05

LEGAL DESCRIPTION

A tract of land located in Section 4, Township 7 North, Range 6 East of the 6th P.M., Lancaster County, Nebraska, more particularly described as follows:

Beginning at the Northwest Corner of said Section 4 and extending thence along the North line of said Section 4, N 89°46'38" E, 2691.50 feet; Thence S 02°27'55" E, 50.04 feet, to a point of curvature; thence on a curve to the right having a central angle of 17°53'00", a radius of 480.00 feet, and a chord bearing S 10°44'10" W (149.21 feet); thence on said curve, 149.82 feet, to a point of reverse curvature to the left, having a central angle of 22°08'35", a radius of 320.00 feet, and a chord bearing S 08°36'22" W (122.90 feet); thence on said curve, 123.67 feet, to a Point of Intersection on the East line of the NW ¼ of said Section 4;

Thence S 02°27'55" E, along the said East line, 2419.82 feet, to a Point of Intersection on the South line of the said NW ¼;

Thence S 89°59'32" W, along the said South Section line, 1315.07 feet, to a Point of Intersection on the East line of the W ½ of the SW ¼ of said Section 4;

Thence S 02°30'27" E, on the said East Section line, 2643.56 feet, to a Point of Intersection on the South line of said Section 4;

Thence N 90°00'00" W, on the said South Section line, 1313.12 feet, to the SW corner of said Section 4;

Thence N 02°33'00" W, on the West line of said Section 4, 2771.43 feet;

Thence N 87°27'00" E, 112.19 feet;

Thence S 63°15'53" E, 805.07 feet;

Thence S 00°00'00" E, 103.15 feet;

Thence S 90°00'00" E, 240.00 feet;

Thence N 00°00'00" W, 270.00 feet;

Thence S 89°59'32" W, 305.00 feet;

Thence N 63°15'53" W, 703.80 feet;

Thence S 87°27'00" W, 143.00 feet, to a Point of Intersection on the said West Section line;

Thence N 02°33'00" W, on the said West Section line, 2480.31 feet, to the Point of Beginning, containing 240.867 acres, more or less.

County Preliminary Plat #04025
County Special Permit #04055
Four Stones
SW 29th & Stagecoach

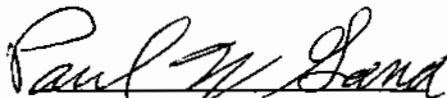
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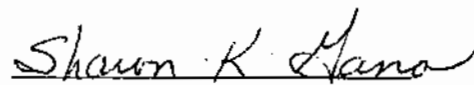


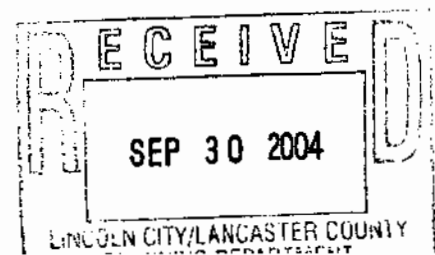
September 28, 2004

RE: FOUR STONES, Preliminary Plat & C.U.P.

We hereby authorize Craig Gana to sign on our behalf in matters pertaining to the above mentioned matter. We also certify that permission is granted to all authorized city/county personnel to enter the premises for the purpose of review of the application for the C.U.P.


Paul W. Gana


Sharon K. Gana



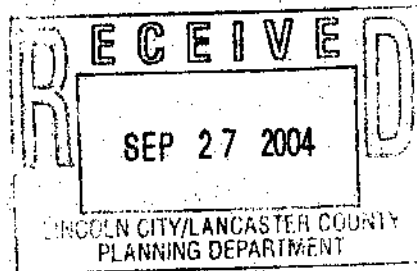
GROUNDWATER REPORT

FOUR STONES

**NW1/4 Sec. 4, T. 7N., R. 6E.
Southwest 29th Street and W. Stagecoach Road
LANCASTER COUNTY**

**Developer: Craig Gana
Petitioner: ESP, Lyle Loth
Hydrogeologist and Preparer of Report:
Vincent H. Dreeszen**

September 27, 2004



Report of Investigation

FOUR STONES

NW1/4 Sec. 4, T. 7N., R. 6E.

Lancaster County

Four Stones is a Community Plan for a subdivision in the NW1/4 Sec. 4, 7N, 6E. located at Southwest 29th Street and West Stagecoach Road. The initial plan is to develop 15 lots ranging in size from slightly more than 3 to 4.76 acres. Lot 4, along a drainage way consists of 14.4 acres. An additional 15 lots are planned for development in the east half of the subdivision at a future date. Approximately half of the quarter, (Outlot "A") south and west of the proposed housing development, is retained for current uses. Outlot "B", near the center of the development consists of 1.75 acres. Excluded from the development is a lot and existing homesite in the southwest corner of the quarter section (Figures 1 and 2).

The development is bounded on the north by West Stagecoach Road and on the west by Southwest 29th Street. Most of the lots are on a hill and sideslopes of Spring Creek (flowing to the north toward Salt Creek) and a tributary of Spring Creek flowing northwest to the creek (Figure 3).

The area is located in the highly dissected glacial terrain

of eastern Nebraska. Glacial till is present in the uplands and is interbedded with glacial outwash sands and sand and gravel. The area appears to be at the juncture of at least two episodes of glacial advance that deposited both glacial tills and outwash sands. Outwash sands and sand and gravel are exposed on the sideslopes in the southwest quarter where they have been mined.

The outwash sands and gravels are the principal aquifer of the area. In addition there is some alluvial sands in the valleys of Spring Creek and its tributaries and is the source of water to some wells. There also appears to be the possibility of a deep-lying basal sand or gravel in one or perhaps two paleovalleys that are tributary to the west to east trending major paleovalley south toward Princeton. Based upon two wells, wells number 5 and 9 (Figure 3), there appears to be some buried knobs of Dakota Sandstone. Although there was sand in well 5 from 67 to 102 feet, the well was completed in 10 feet of sandstone to a depth of 184 feet. Well 9, a UNL-CSD test, near the NE corner of the subdivision had 15 feet of sand and gravel from 125 to 140 feet and 29 feet of sand from 156 to 169 feet. Sandstone was logged from 185 to 190 feet. Permian age limestone and shale, the bedrock in most of the area was drilled below the sandstone.

Wells 1, 2, 3, 4, 7 and 8 are completed either in glacial outwash sands or in the case of wells 1 and 2, alluvial sands.

Wells 1, 2, 3, 7 and 8 range in depth from about 60 to 75 feet. The log of well 1 is attached. Wells 4, 7 and 8 are all about 125 feet deep. Well 6 is an example of a well that had an upper glacial outwash sand from 85 to 124 feet and a deeper lying sand in the paleovalley from 235 to 245 feet.

Two other wells were drilled into the deep lying sands of the paleovalley in Section 3 to the east. Both of these wells are irrigation wells and well G-87008 (Well 10) in the NE1/4 had the upper sand and gravel from 170 to 182 feet and the lower sand and gravel from 237 to 244 feet. The irrigation well Registration No. 48702, in the center of the SW1/4 Section 3 (Well 11), had sand from 125 to 190 feet and sand and gravel from 190 to 220 feet. Both wells were reported to yield 600 gpm or more.

There are also several irrigation wells in section 5 to the west of Four Stones. Most of the wells are 90 to 100 feet deep in Spring Creek valley and yields reported were generally more than 500 gpm. A few of the first several wells drilled in that area were reported to have flowed at the surface.

Based upon the available information, the potential for developing an adequate quantity of water for individual domestic wells in the Four Stones subdivision appears to be good. Outwash glacial sands are most likely to be the source of water. There is

also the possibility of basal sands in the paleovalley and a somewhat remote chance of a secondary or supplementary Dakota sandstone aquifer on some lots.

Water samples were collected recently and analyzed for inorganic chemical constituents. Copies of the analyses for wells 1, 2, 3, and 4 are attached. Total soluble salts range from 352 to 416 ppm. Hardness ranges from less than 100 to about 200 ppm. Sodium and chloride concentrations are very low as are sulfates. Iron and manganese are low, generally 0.1 to 0.2 ppm each. Nitrates are quite low with the exception of well 1 which was reported to have 7.29 ppm.

The potential for developing an adequate quantity of potable water from one or more of the aquifers in the area for private domestic wells is quite good. One or more test wells should be drilled on any given lot before construction of a home on the site.

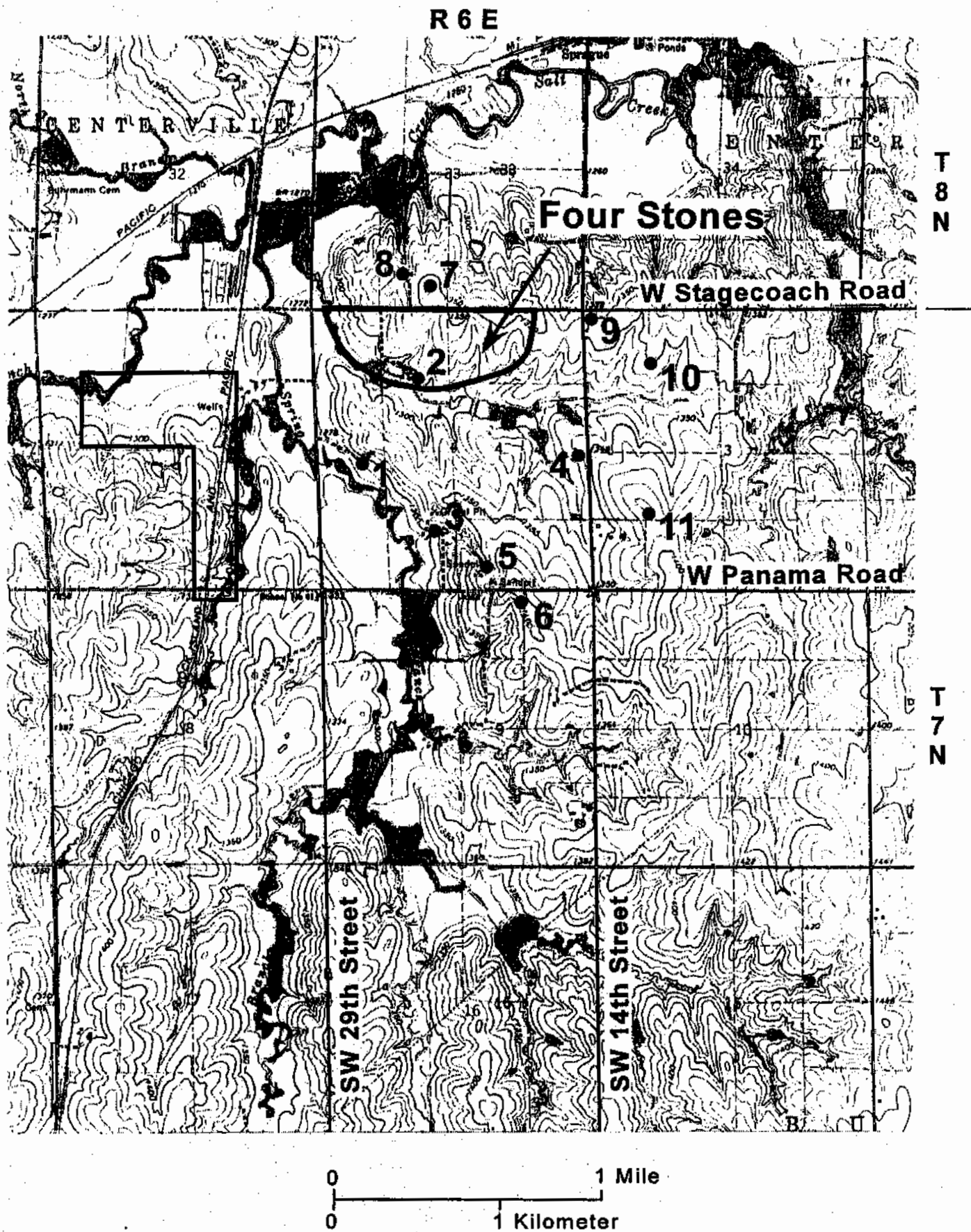


Figure 3. Map showing the location of wells referred to in Groundwater Report.

Roger Strader
Office: (402) 673-3465

STRADER'S
BLUE VALLEY DRILLING
14734 US Hwy 77
Pickrell, NE 68422
WELL COMPLETION FORM

Four Stones

Well 1

Well Contractor's License
#39022

Name Paul Gana Date September 27, 2001

Address 21500 SW 14th Street

City/State/Zip Martell, NE 68404

Phone 794-4415

-GPS- N 40° 36.201' - W 096° 45.536'

Location of Water Well

County: Lancaster NW 1/4 SW 1/4 Section 4 Township 7 N Range 6 E E/W

Well is ft. from north/south section line. ft. from east/west section line. Ground Elevation ft.

Distance and Direction from nearest town (or) street address (or) Block, Lot and Addition: Princeton 1 1/2 north to

Panama Road - 3 west to SW 29th - 1/2 north - east down drive

Well use Domestic New / ~~Replacement~~ Distance to Old Well ft.

Old Well Last Used Old Well Abandoned No/Yes (Date)

DEPTH IN FEET

FORMATION

Depth of completed well 75 ft.
Method drilled Straight rotary
Bore hole diameter 9.5 in.
Static water level 40 ft.

FROM	TO
0	12
12	23
23	51
51	61
61	72
72	80

Clay - brown
Sand - fine to medium fine brown
Sand - fine brown
Clay - silty & sandy brown
Sand - fine to medium fine brown
Clay - blue/gray

Yield gpm at 50 ft. lift
25 gpm at 70 ft. lift
 gpm at ft. lift

Hrs. Development 1

Method Air

Blank Casing: Length 65 ft.

Inside diameter 5 in.

Type of Material PVC

Wall thickness or grade .265" (200#)

Joints: Welded / Glued / ~~Welded~~

Guides at ft. & ft.

Screen: Inside Diameter 5 in.

Type of material & grade 200# PVC

Screen interval(s):

65 ft. to 75 ft.

 ft. to ft.

Slot size .018" Type Saw slot

Trade name Guides at ft.

Bottom Cap: Type PVC Size 5 in.

Gravel Pack interval(s):

57 ft. to 75 ft.

 ft. to ft.

 ft. to ft.

Grate size 47-B Amount 700#

Grout:

6 to 10 ft. with Bentonite

54 to 57 ft. with Bentonite

to ft. with

Disinfection: Yes / No

Was a chemical / bacteriological analysis obtained? No / Yes (Date)

Pump: Installed Yes / No (Recommended pump setting 60 ft. Recommended pumping rate 10 GPM)

Pump Installer

Remarks

Sep 23 04 02:38p

Mds Pharma Serv Lnk Ne

408 478 7500

Sep 23 2004 03:02PM

P. 4

MDS Harris

624 Peach Street
Lincoln, NE 68502

Tel: 402-476-2811
www.turf.mds-harris.com

**WATER
ANALYSIS**

Submitted For
JARRY KELLER

MARTELL, NE 68404

SAMPLE MARKED

3

LABORATORY NUMBER

04703903

DATE RECEIVED

22-Sep-2004

DATE REPORTED

23-Sep-2004

*Four Stones
Well 1*

Submitted By

Gane Trucking & Excavating
2200 W. Panama Road
Martell, NE 68404

ANALYSIS OF		UNIT OF MEASURE		RESULT	LIB/ ACRE FOOT	PROBLEM
CHEMICAL PROPERTIES						
pH	pH	--		7.9	---	
	Hardness	--		177.1	---	
	Bicarbonate	ppm		281.2	764.3	
	Carbonate	ppm		0.0	0.0	
Electrical Conductivity (ECw)		mmhos/cm		0.55	---	
Total Soluble Salts		ppm		352	957	
Sodium Chloride	Sodium	meq/l		0.87	---	
	Chloride	ppm		14	39	
	Boron	ppm		0.01	0.00	
Sodium Chloride	Sodium	ppm		20.0	54.0	
	Chloride	ppm		14	39	
Sodium Absorption Ratio (AR)		meq/l		1.35	---	
Electrical Conductivity (ECw)		mmhos/cm		0.55	---	
Total Soluble Salts		ppm		352	957	
To maintain good soil structure in arid regions, irrigation water should have the capacity to replace the soluble salts being dissolved. If the salts being dissolved are not replaced, a decrease in permeability may occur.						
No anticipated difficulty with most crops.						
Some difficulty for sensitive & moderately sensitive crops.						
Significant difficulty for most crops.						

PLANT NUTRIENTS AS NORMALLY REPORTED IN WATER ANALYSIS		RESULTS AS PPM	NUTRIENTS CONVERTED TO BASIC FERTILIZER MATERIAL FORMS		RESULTS AS PPM	HEQ/LITER	
NITRATE (NO ₃ -N)		7.29	NITROGEN (N)		19.80	CATIONS	
PHOSPHATE (PO ₄)		0.01	PHOSPHATE (P ₂ O ₅)		0.02	K+	
POTASSIUM (K)		2.00	POTASH (K ₂ O)		6.50	NA+	
MAGNESIUM (Mg)		9.0	MAGNESIUM OXIDE (MgO)		40.5	CA++	
CALCIUM (Ca)		56.0	CALCIUM (Ca)		152.3	MG++	
SULFATE (SO ₄)		27.0	SULFUR (S)		24.3	ANIONS	
MANGANESE (Mn)		0.01	MANGANESE (Mn)		0.03	CL-	
IRON (Fe)		0.10	IRON (Fe)		0.27	SO4--	
BORON (B)		0.01	BORON (B)		0.00	HCO3-	
						CO3--	
						PO4---	
						NO3-	

pHc 7.33
TOTAL CATIONS 1.46
TOTAL ANIONS 6.09
SAR 0.55

MDS Harris624 Peach Street
Lincoln, NE 68502Tel: 402-476-2811
www.turf.mds-harris.com**WATER
ANALYSIS**Submitted For
BURIDMAN

MARSHALL, NE 68404

SAMPLE MARKED

2

LABORATORY NUMBER

04703902

DATE RECEIVED

22-Sep-2004

DATE REPORTED

23-Sep-2004

Four Stones
Well 2

Submitted By

Garcia Trucking & Excavating
2200 W. Panama Road
Martell, NE 68404

ANALYSIS OF CHEMICAL PROPERTIES		UNIT OF MEASURE	RESULT	LBS/ ACRE FOOT	
pH	pH	---	8.1	---	
	Hardness	---	99.4	---	
	Bicarbonate	ppm	381.3	1035.3	
	Carbonate	ppm	0.0	0.0	
Electrical Conductivity (ECw)		mmhos/cm	0.65	---	
Total Soluble Salts		ppm	416	1132	
Sodium	Sodium	mg/l	3.00	---	
	Chloride	ppm	27	75	
	Boron	ppm	0.30	0.80	
Sodium	Sodium	ppm	69.0	189.0	
	Chloride	ppm	27	75	
Sodium Absorption Ratio Adj		mg/l	5.84	---	
Electrical Conductivity (ECw)		mmhos/cm	0.65	---	
Total Soluble Salts		ppm	416	1132	
To maintain good soil structure in arid regions, irrigation water should have the capacity to replace the soluble salts being dissolved. If the salts being dissolved are not replaced, a decrease in permeability may occur.					No anticipated difficulty with most crops. Some difficulty for sensitive & moderately sensitive crops. Significant difficulty for most crops.

ANALYSIS OF FERTILIZER							
PLANT NUTRIENTS AS NORMALLY REPORTED IN WATER ANALYSIS	RESULTS AS PPM	NUTRIENTS CONVERTED TO BASIC FERTILIZER MATERIAL FORMS	RESULTS LBS/ACRE FOOT	MEQ/LITER			
NITRATE (NO ₃ -N)	1.98	NITROGEN (N)	5.40	CATIONS	K+		0.10
PHOSPHATE (PO ₄)	0.01	PHOSPHATE (P ₂ O ₅)	0.02		NA+		3.00
POTASSIUM (K)	4.00	POTASH (K ₂ O)	13.00		CA++		1.40
MAGNESIUM (Mg)	7.0	MAGNESIUM OXIDE (MgO)	31.5		Mg++		0.56
CALCIUM (Ca)	28.0	CALCIUM (Ca)	76.2	ANIONS	CL-		0.77
SULFATE (SO ₄)	19.0	SULFUR (S)	17.1		SO ₄ --		0.40
MANGANESE (Mn)	0.10	MANGANESE (Mn)	0.27		HCO ₃ -		5.25
IRON (Fe)	0.30	IRON (Fe)	0.82		CO ₃ --		0.00
BORON (B)	0.30	BORON (B)	0.80		PO ₄ ---		0.00
					NO ₃ -		0.14

pHc 7.45
 TOTAL CATIONS 5.09
 TOTAL ANIONS 7.53
 SAR 3.02

MDS Harris624 Peach Street
Lincoln, NE 68502Tel: 402-476-2811
www.turf.mds-harris.com**WATER
ANALYSIS**Submitted For
CRAIG GANA

MARTELL, NE 68404

Submitted By

Gana Trucking & Excavating
2200 W. Panama Road
Martell, NE 68404Four Stones
Well 3

SAMPLE MARKED

2

LABORATORY NUMBER

04703901

DATE RECEIVED

22-Sep-2004

DATE REPORTED

23-Sep-2004

ANALYSIS OF CHEMICAL PROPERTIES			UNIT OF MEASURE		RESULT	LBS/ ACRE FOOT	DATE RECEIVED	POSSIBLE PROBLEMS	PROBABLE PROBLEMS	
pH	(For Overpass Sewer Only)	pH	---	7.7	---					
		Hardness	---	196.3	---					
		Bicarbonate	ppm	377.6	1026.4					
		Carbonate	ppm	0.0	0.0					
Electrical Conductivity (ECw)			mmhos/cm	0.59	---					
Total Soluble Salts			ppm	378	1027					
Sodium Chloride		meq/l		0.91	---					
		ppm		12	33					
		Boron	ppm	0.01	0.00					
Sodium Chloride			ppm		21.0	57.0				
			ppm		12	33				
Sodium Absorption Ratio Adj			meq/l	1.46	---					
Electrical Conductivity (ECw)			mmhos/cm	0.59	---					
Total Soluble Salts			ppm	378	1027					
To maintain good soil structure in arid regions, irrigation water should have the capacity to replace the soluble salts being dissolved. If the salts being dissolved are not replaced, a decrease in permeability may occur.						No anticipated difficulty with most crops.			Some difficulty for sensitive & moderately sensitive crops	Significant difficulty for most crops

ANALYSIS OF NUTRIENTS						
PLANT NUTRIENTS AS NORMALLY REPORTED IN WATER ANALYSIS	RESULTS AS PPM	NUTRIENTS CONVERTED TO BASIC FERTILIZER MATERIAL FORMS	RESULTS LB/ACRE FOOT	MEQ/LITER		
NITRATE (NO ₃) ^{-N}	0.01	NITROGEN (N)	0.00	CATIONS	K+	0.08
PHOSPHATE (PO ₄)	1.00	PHOSPHATE (P ₂ O ₅)	2.03		NA+	0.91
POTASSIUM (K)	3.00	POTASH (K ₂ O)	9.70		CA++	3.09
MAGNESIUM (Mg)	10.0	MAGNESIUM OXIDE (MgO)	45.0		MG++	0.82
CALCIUM (Ca)	62.0	CALCIUM (Ca)	168.6	ANIONS	CL-	0.34
SULFATE (SO ₄)	25.0	SULFUR (S)	22.5		SO ₄ --	0.52
MANGANESE (Mn)	0.10	MANGANESE (Mn)	0.27		HCO ₃ -	6.19
IRON (Fe)	0.18	IRON (Fe)	0.27		CO ₃ --	0.00
BORON (B)	0.01	BORON (B)	0.00		PO ₄ ---	0.01
					NO ₃ -	0.50

pHc 7.17
 TOTAL CATIONS 4.91
 TOTAL ANIONS 7.06
 SAR 0.65

MDS Harris

624 Peach Street
Lincoln, NE 68502

Tel: 402-476-2811
www.turf.mdsharris.com

**WATER
ANALYSIS**

Submitted For
SPAULDING

MARTELL, NE 68404

Submitted By

Gara Trucking & Excavating
2200 W. Panama Road
Martell, NE 68404

*Four Stones
Well 4*

SAMPLE MARKED

4

LABORATORY NUMBER

04703904

DATE RECEIVED

22-Sep-2004

DATE REPORTED

23-Sep-2004

ANALYSIS OF CHEMICAL PROPERTIES			UNIT OF MEASURE	RESULT	LBS/ ACRE FOOT	LABORATORY	EXCELLENCE PROBLEM	PROBABLE PROBLEM
pH		---		8.1	---	[REDACTED]		
	Hardness	---		190.6	---			
	(For Domestic Sprinkler Only)			353.8	962.9			
	Bicarbonate	ppm		0.0	0.0			
Electrical Conductivity (ECw)		mmhos/cm		0.63	---	[REDACTED]		
	Total Soluble Salts	ppm		403	1097			
Sodium Chloride		meq/l		1.22	---	[REDACTED]		
		ppm		23	62			
	Boron	ppm		0.01	0.00			
Sodium Chloride		ppm		28.0	76.0	[REDACTED]		
		ppm		23	62			
Sodium Absorption Ratio Adj		meq/l		1.93	---	[REDACTED]		
	Electrical Conductivity (ECw)	mmhos/cm		0.63	---			
	Total Soluble Salts	ppm		403	1097			
To maintain good soil structure in arid regions, irrigation water should have the capacity to replace the soluble salts being dissolved. If the salts being dissolved are not replaced, a decrease in permeability may occur.						No anticipated difficulty with most crops.		

ANALYSIS OF NUTRIENTS						
PLANT NUTRIENTS AS NORMALLY REPORTED IN WATER ANALYSIS	RESULTS AS PPM	NUTRIENTS CONVERTED TO BASIC FERTILIZER MATERIAL FORMS	RESULTS LBS/ACRE FOOT	MEQ/LITER		
NITRATE (NO ₃ ⁻ N)	0.59	NITROGEN (N)	1.60	CATIONS	K+	0.13
PHOSPHATE (PO ₄)	0.01	PHOSPHATE (P ₂ O ₅)	0.02		NA+	1.22
POTASSIUM (K)	5.00	POTASH (K ₂ O)	16.20		CA++	2.89
MAGNESIUM (Mg)	11.0	MAGNESIUM OXIDE (MgO)	49.5	ANIONS	MG++	0.90
CALCIUM (Ca)	58.0	CALCIUM (Ca)	157.8		CL-	0.64
SULFATE (SO ₄)	97.0	SULFUR (S)	87.3		SO4--	2.02
MANGANESE (Mn)	0.20	MANGANESE (Mn)	0.54		HCO3-	5.80
IRON (Fe)	0.10	IRON (Fe)	0.27		CO3--	0.00
BORON (B)	0.01	BORON (B)	0.00		PO4---	0.00
					NO3-	0.04

pHc 7.22
 TOTAL CATIONS 5.14
 TOTAL ANIONS 8.51
 SAR 0.86



CITY OF LINCOLN NEBRASKA

MAYOR COLEEN J. SENG

www.ci.lincoln.ne.us

Lincoln-Lancaster County
Planning Department
Marvin S. Krout, Director
Mary E. Bills-Strand, Chair
City-County Planning Commission
555 South 10th Street
Suite 213
Lincoln, Nebraska 68508
402-441-7491
fax: 402-441-6377

April 29, 2005

Matt Langston
ESP
601 Old Cheney Road, Suite A
Lincoln, NE 68512

RE: County Special Permit No. 04055 and County Preliminary
Plat No. 04025 - Four Stones
(S.W. 29th & Stagecoach Road)

Dear Mr. Langston:

On April 27, 2005, the Lincoln City-Lancaster County Planning Commission held continued public hearing on the above referenced applications and granted the applicant and staff request for an additional deferral, with continued public hearing and action scheduled for **Wednesday, May 25, 2005, 1:00 p.m.**

Please feel free to contact me if you have any questions or need additional information (402-441-6365) or plan@lincoln.ne.gov.

Sincerely,


Jean Walker
Administrative Officer

I:\pc\notifaction letters\2004-05\act0427.05

cc: Kent Seacrest, 1111 Lincoln Mall, Suite 350, 68508
Craig Gana, 2200 W. Panama Road, Martell, NE 68404
Paul and Sharon Gana, 21500 S.W. 14th Street, Martell, NE 68404
Joe M. Lionberger, 3405 West Sprague Road, Martell, NE 68404
Glenn Johnson, Lower Platte South NRD, P.O. Box 83581, 68501
Robert Rahorst, et al., 23045 S.W. 2nd, Martell, NE 68404
Steve Kramer, 19405 S.W. 29th Street, Martell, NE 68404
Valerie Egger, 1000 W. Stagecoach Road, Martell, NE 68404
Andrew Lewis, 901 W. Stagecoach Road, Martell, NE 68404
Lorance and Roberta Newburn, 600 W. Stagecoach Rd., Martell, NE 68404



January 4, 2005
Mr. Mike Dekalb
555 S. 10th Street
Room 213
Lincoln, NE
68508

LYLE L. LOTH, P.E./L.S.

Suite A - 601 Old Cheney Road
Lincoln, NE 68512

Phone (402) 421-2500
Fax (402) 421-7096

Email: lyle@espeng.com

Re: Four Stones Preliminary Plat & C.U.P.

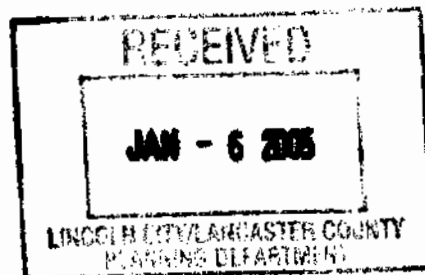
Mike,

On behalf of my client, Craig Ganna, I am hereby requesting a one month deferral on any Administrative Action by the Planning Commission involving the Four Stones Preliminary Plat & C.U.P. Please give me a call if you have any questions or concerns with this matter. Thank you for your help in this matter.

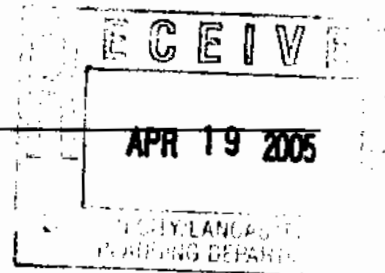
Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Langston', with a horizontal line extending to the right.

Matt Langston



MEMORANDUM



To: Matt Langston, ESP

From: David Kracman
Tom Riley, P.E.

Date: 7 April 2005

Re: Technical Memorandum for Dam Breach Analysis for the Four Stones Development, SW 29th Street & Stagecoach Road, Sprague, Lancaster County, Nebraska

INTRODUCTION

The Flatwater Group, Inc. (TFG) was asked to produce a dam breach analysis for the Four Stones development. TFG conducted site visits and windshield surveys of the watershed upstream of the detention dam listed by DNR's Dams Inventory as NE000504 (also referred to as Dam U-36 in the "As Built" plans). Survey data was collected along the stream channel, along the top of Dam U-36 and the downstream grade stabilization dam (U-36A), and at other key points such as culverts and bridges. A land use map was generated based on the windshield surveys and combined with available soil data to produce a customized curve number map of the entire watershed. The survey data was incorporated with elevation data from Digital Elevation Models (DEMs) using a terrain smoothing technique, and used to perform hydrologic and hydraulic modeling of the area. A dam breach analysis was then developed using techniques outlined in the Soil and Conservation Service's TR60. Steady state assumptions were then used to produce an inundation map of the area downstream of Dam U-36 based on the calculated TR60 flow rate. The Nebraska Department of Natural Resources (DNR) Dam Safety Division was consulted and provided recommendations on conducting the dam breach evaluation.

SITE VISIT and DATA COLLECTION

TFG personnel visited the Four Stones site on several occasions. Observed watershed features were evaluated to determine hydrologic input parameters (including land use), confirm the estimated drainage boundaries, and to determine the overall condition of the watershed.

The stream that forms the southern border for the proposed Four Stones development is an upper branch of Salt Creek. The watershed area upstream of Dam U-36, which is located just upstream from the development site, is approximately 558 acres. Two primary branches join upstream of Dam U-36, with the southern branch regulated by an additional grade stabilization dam (U-36B). Total storage capacity for the primary detention dam (U-36), the downstream stabilization dam (U-36A) and the upstream stabilization dam (U-36B) are approximately 290 af, 14 af, and 67 af, respectively. Each dam includes a culvert serving as the primary outlet, along with an auxiliary spillway to convey higher flows. At the northwest corner of the property, a 8ft by 10ft concrete box culvert carries flows under Stagecoach Road.

The watershed area is agricultural with a few farmsteads, one industrial mining operation, and small acreages. Rowed crops and pastures are the dominant landuse types. The main roads within the watershed include W. Stagecoach Road on the north, W. Panama Road to the south, SW 29th Street to the west, and SW 14th Street to the east. Multiple culvert crossings are found along these roads, and the

confluence of the tributary stream and the main Salt Creek channel is less than $\frac{1}{2}$ a mile north of the Stagecoach Road culvert. Channel slope for much of the stream length is on the order of 20 feet/mile.

A survey was conducted to determine the channel and overbank dimensions and key elevations for the downstream culvert. Survey data was referenced to bench mark disk LG0357, designation Z-174, Lancaster County, Nebraska (Elevation 1322.04 feet, NAVD 88). This information was used to supplement Digital Elevation Maps for Lancaster County obtained from the Nebraska Natural Resources Data Bank. In addition, aerial photography, USGS 1:24,000 topographic maps, soil survey information, and other sources were collected and used in the analysis.

HYDROLOGIC AND HYDRAULIC ANALYSIS

Hydrology

The as-built plans contained the hydrologic analysis used in the original dam design. The computational method for developing runoff estimates and hydrographs was the Rational Method. While an appropriate method for the era (circa 1959) this analysis, in our opinion, would not generally be an acceptable procedure using today's state of the practice. Therefore, an updated approach to estimating the hydrograph for various storm events was developed and is described below.

The hydrologic response of the watershed was estimated using the U.S. Army Corps of Engineers' HEC-RAS model, incorporating topography information from the Digital Elevation Model (DEM) through the HEC-GeoHMS application, which integrates HEC-HMS and GIS capabilities. No USGS gauges were located on or near the property, so only non-empirical hydrology methods were available for the analysis. The watershed was divided into subbasins at each of the three dam sites and at the confluence of the two primary channels. Aerial photography available from DNR was used along with windshield surveys and crop data from the National Agricultural Statistics Service to derive a land use map of the entire watershed, and combined with SSURGO soil data from DNR to create a composite curve number map for each subbasin. SCS lag times were then developed for the subbasins using the DEM elevation data, approximate channel dimensions and Manning's roughness values, and TR55 methods built-in to the HEC-GeoHMS software.

The Muskingum-Cunge 8-Point routing technique was used for the HEC-HMS channels, and Intensity-Duration-Frequency curves developed by the City of Lincoln were used with the alternating block method to construct rainfall hyetographs for 50- and 100-year events. Resulting 50- and 100-year inflows for Dam U-36 reached maximum levels of 749 cfs and 926 cfs, respectively about 4 hours into the 6-hour rainfall event, and 50- and 100-year outflows reached maximum levels of 26 cfs and 27 cfs, respectively, as reservoir elevations peaked just below the auxiliary spillway level.

Peak Breach Discharge

At the direction of DNR's Dam Safety Division, the SCS' TR60 methodology (SCS 1991) was included as a technique for determining a maximum flow rate resulting from the failure of Dam U-36. Technical Release 60 (TR60) was developed in 1985, and amended thereafter, by the Soil Conservation Service (now NRCS) to estimate the impact of failure from earth dams and reservoirs.

Key inputs in determining the peak breach discharge include initial reservoir storage (set at an elevation near the top of the dam, above the auxiliary spillway crest), headwater elevation, the width of the upstream valley, and the cross-sectional area of the embankment. Since the depth of water at the dam at the time of failure (32 ft) is well below the 103 ft threshold established by TR60, and the upstream valley

width is greater than the theoretical breach width estimated by the procedure, standard TR60 equations can be used which yield a maximum downstream flow rate of 18,536 cfs.

Hydraulics

For routing the peak breach discharge downstream from the dam, HEC-RAS steady flow modeling was incorporated using a customized terrain model developed by TFG. Since the elevation data from DNR's DEM representations were based on grid cells 10 m by 10 m, while the stream channel was often only about 10 ft across at the top of the banks, surveying was used to develop a better representation of the downstream channel and other terrain features below the dam. In order to minimize the discrepancies that often result from combining terrain data from different sources, a new terrain smoothing technique (Tate et al. 2002) was used to integrate the DEM and survey terrain data. A triangulated irregular network (TIN) was generated using the mass points from the survey data (as adjusted by the smoothing algorithm), and a "clipped" partial version of the DEM elevation dataset. Following the development of the "smoothed" terrain model, HEC-GeoRAS was then used to export cross section geometries, stream centerlines, overbank flow paths, and other geometry data from the TIN into the HEC-RAS modeling environment. A steady flow model run was developed within HEC-RAS using the peak breach discharge derived from TR60, and resulting water surface elevations along each cross section were then generated.

For the purposes of the HEC-RAS model, the downstream grade stabilization dam U-36A was included as an embankment and culvert, and the Stagecoach box culvert was also modeled in order to include backwater affects. The most upstream cross section used in the model was located just below detention dam U-36, and the most downstream section was north of the Stagecoach culvert. Because the left bank of the channel abuts a larger tributary of the Salt Creek (the Spring Branch), an artificial levee was added on the left bank downstream of the dam in order to ensure that flows were routed solely through the stream reach and not within the channel of the Spring Branch.

EXTENT OF FLOOD INUNDATION RESULTING FROM BREACH

With the water surface elevations for each cross section developed from the HEC-RAS model, the HEC-GeoRAS application was used to drape the projected water surface over the GIS terrain TIN. Figure 1 shows the estimated extent of inundation resulting from the dam breach. As shown, the extent of inundation is predicted to largely remain outside of the purposed Four Stones development area.

In addition, we would recommend the construction of a concrete box culvert no larger than the county road box culvert for the road crossing accessing the development. As noted above, both the 50 and 100 year storm events would not engage the auxiliary spillway based on the updated hydrology estimates.

REFERENCES:

1. City of Lincoln Public Works and Utilities Department, Drainage Criteria Manual, February 22, 2000.
2. Tate, Eric et al., "Creating a Terrain Model for Floodplain Mapping", Journal of Hydrologic Engineering, March/April 2002.
3. Soil Conservation Service, Technical Release 60, January 30, 1991 Revision.

Lancaster

DON R. THOMAS - COUNTY ENGINEER

County

Engineering

Department

DEPUTY- LARRY V. WORRELL
COUNTY SURVEYOR

DATE: April 25, 2005
TO: Mike DeKalb
Planning Department
FROM: Larry V. Worrell
County Surveyor
SUBJECT: FOUR STONES PRELIMINARY PLAT & CUP

APR 26 2005

This office has reviewed subject development and would offer the following comments:

- 1) The existing field entrance to Outlet A on West Stagecoach Road should be relocated to be on West Fresh Water Lane.
- 2) Each buildable lot will be allowed only one residential access.
- 3) Interior intersections shall have 30.00 feet radius returns. Intersections on West Stagecoach Road and SW 29th Street shall have 50.00 feet radius returns.
- 4) Radius dimensions shall be shown for all cul-de-sacs.
- 5) Our records indicate the box culvert under West Stagecoach Road to be 8' X 6'. The Flatwater report states it is 8' X 10', the drainage plan shows it is 6' X 9', and the profile shows a 10' X 8'. This discrepancy shall be resolved.
- 6) The drainage computations compute the pipe capacity as a storm sewer instead of evaluating them as culverts using inlet and outlet control methods.
- 7) Access to Lots 2 and 3, Block 1 from South Deer Track Circle will be very difficult due to the significant cut of the cul-de-sac.
- 8) *General Note 14* shall be revised to note that County maintenance will be available after 60% of the buildable lots are occupied and the roads are still meeting standards.
- 9) On the typical grading section, there are two leaders with no notes.

SUBJECT: FOUR STONES PRELIMINARY PLAT & CUP

- 10) The intersection of South Red Fox Drive should be moved east to the top of the existing hill or West Stagecoach Road regraded to provide adequate sight distance to the east.
- 11) A culvert is needed under West Fresh Water Lane for the east ditch of SW 29th Street.
- 12) The box culvert and grading of West Fresh Water Lane will need a Flood Plain permit. Submit documentation showing that the road and proposed culvert will not raise the 100 year water surfaces by more than one foot
- 13) The top of the culvert at Sta. 17 + 75 on West Fresh Water Lane is less than one foot below the center of the intersection elevation which may not be adequate when the required headwater is determined for this culvert.
- 14) With the proposed profile of West Fresh Water Lane the box culvert at sta. 5 + 00 will never be full. It appears some other profile and box size would be more efficient.

**LINCOLN-LANCASTER COUNTY HEALTH DEPARTMENT
INTER-OFFICE COMMUNICATION**

TO: Mike DeKalb **DATE:** April 26, 2005
DEPARTMENT: Planning **FROM:** Chris Schroeder
ATTENTION: **DEPARTMENT:** Health
CARBONS TO: EH File **SUBJECT:** Four Stones
 EH Administration SP #04055 PP #04025
 Resubmittal

The Lincoln-Lancaster County Health Department has reviewed the proposed development with the following noted:

- The developer proposes the use of individual water wells for potable water supply. The water report indicates the potential for developing an adequate quantity of potable water from one or more of the aquifers is quite good. The water report states that one or more test wells should be drilled on any given lot before construction of a home on the site.
- The developer proposes the use of individual wastewater treatment systems. Standard systems such as lagoons or subsurface fields shall be installed based on percolation test results. Areas of flood plain exist on several of the lots. It appears that adequate area exists to avoid these areas with proper planning and site layout.
- During the construction process, the land owner(s) will be responsible for controlling off-site dust emissions in accordance with Lincoln-Lancaster County Air Pollution Regulations and Standards Article 2 Section 32. Dust control measures shall include, but not limited to application of water to roads, driveways, parking lots on site, site frontage and any adjacent business or residential frontage. Planting and maintenance of ground cover will also be incorporated as necessary.



AREA 2
SERVICE CENTER

R.R. 1 BOX 56
ROCA, NEBRASKA 68430
402/423-3855
FAX 402/423-8090

APR 25 2005

April 22, 2005

Mike Dekalb, Project Planner
555 S. 10th #213
Lincoln, NE 68508

RE: Four Stones

Dear Mike,

I have reviewed the subject plat and see no easements in place. I would request our standard 10' easement along all exterior lot lines, and 10' [5' each side] of adjacent lot lines.

Thanks for your cooperation.

Sincerely,

Rick Volmer, Staking Engineer



"Glenn Johnson"
<Glenn@lpsnrd.org>
10/26/2004 12:14 PM

To: <mdekab@cl.lincoln.ne.us>
cc: "Jeff Hegy" <Jeff@lpsnrd.org>
Subject: Comments on Four Stones Community Unit Plan, Special Permit and Preliminary Plat

Yesterday afternoon (Monday, October 25, 2004) Jeff Hegy and I met with Matthew Langston of ESP to talk about the proposed preliminary plat for Four Stones CUP. This was the first we were aware of this proposal, and didn't realize until last night that it was coming before the Planning Commission this week.

This proposal runs along, and in some cases within, the easement area which the Lower Platte South NRD has for a flood control dam and two grade stabilization dams in the Upper Salt Creek Watershed. These structures were constructed in the mid-1950's, but are still functional and we maintain them today. The larger dam is located in the S1/2NE1/4 of the section, in Lot 9 in the area shown in the floodplain. The grade stabilization dam impacted is constructed just west of the half-section line in the flood plain area, just where the proposed north-south road terminates, and has a pool that backs up to the east. The actual area included within the easements includes not only the S1/2NE1/4 but also the E1/2NW1/4 in their entireties.

We advised Matt of these easements and provided him with copies. If requested, the District has been willing to prepare new easements that more accurately include only the areas actually needed for the operation and maintenance of the dams, and this could be considered in this case. The other issue in this case, as is happening with other dams, is if development occurs downstream of these dams, there is a possibility that the State may view these as being a higher hazard classification than when originally constructed and can order the dam owner (NRD) to modify the dam to meet a higher hazard classification. (These situations are considered on a case-by-case basis.) We can't say with certainty that this would be the consequence in this case.

Matt had indicated to us that the developer was considering reducing the number of lots and none would likely actually then fall within the flood pools of the dams, but the downstream issue would still remain.

If the lots drain into the dams, there would be the concern of septic and the location of wells in relation to the permanent and flood pools of the dams.

I unfortunately will be out of the City tomorrow for the Planning Commission but I wanted to get these comments to you.

Call me with questions.

Glenn Johnson
476-2729
432-6833 (cellular)



Steve & Deb
<sndkram@access-4-fr
ee.com>

01/03/2005 01:34 PM

To: mdekalb@lincoln.ne.gov
cc:
Subject: special permit no. 04055, four stones community unit plan

This is to reiterate our opposition to this plan. The changes the developers have made to try to camouflage their intent don't change anything. Urban sprawl is urban sprawl, and that was the reason for county zoning laws. I will be unable to testify personally this time but hope this serves to register our opposition. Thank you.

Stephen and Debra Kramer

IN @POSITION

ITEM NO. 4.1a&b: COUNTY SPECIAL PERMIT 04055
COUNTY PREL. PLAT 04025
(p.101 - Cont'd Public Hearing - 2/16/05)



Steve & Deb
<sndkram@access-4-fr
ee.com>

To: plan@lincoln.ne.gov
cc:
Subject: County Special Permit No. 04055 and County Preliminary Plat No.
04025- Four Stones

02/11/2005 08:02 PM

Jean Walker,

M Husband and I won't be able to attend the meeting on 2-16-05. We still want our feelings made known. We moved to the country for it's peace and quiet. This housing developement will bring Lincoln clear out around us. The country as we know it will be gone. No matter how many times they ask for deferral it will not change our minds. Others have tried a housing project and failed. I am not sure that we need one this far from Lincoln. We appreciate being informed about the meetings. Thanks.

Sincerely,

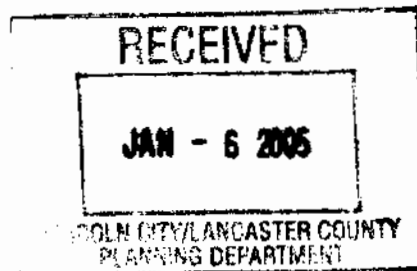
Debra L. Kramer

19405 SW 29th St

Martell, NE 68404

Valerie Egger
1000 W. Stagecoach Rd.
Martell NE 68404
January 2, 2005

Lincoln-Lancaster County Planning Department
555 S. 10th St., Suite 213
Lincoln NE 68508



RE: County Special Permit No. 04055 and County Preliminary Plat No. 04025—Four Stones
(SW 29th & Stagecoach Road)

I am writing to protest the Four Stones Development proposed by Craig Gana and ESP at approximately SW 29th Street and West Stagecoach Road.

While I appreciate the changes Mr. Gana and ESP have made to the proposed CUP by reducing the size from 30 to 15 lots, and rerouting the main entrance from West Stagecoach Road to SW 29th Street, I still have major concerns about safety issues arising from developing a cluster of fifteen homes in the area.

Stagecoach Road

Stagecoach Road currently has a very minimal amount of traffic in our neighborhood due to the fact that it dead ends about a half mile west of SW 29th (a bridge is out) and four miles east of Hwy 77. Additionally, about a half mile east of Hwy 77, it changes to a dirt road or, during wet weather, a mud road. It is not a through road like Panama Road, SW 14th or SW 29th. Therefore, additional traffic creates an immediate impact. Between SW 14th and Hwy 77 three homes are located very close to the road: two homes (one is mine) are located about 30 feet from the road; another home is located about 40-50 feet back. These homes are especially impacted negatively by increase in the volume of traffic. Examples are hunting season, or even more extreme, when the road is used as a detour as it was this past summer which was absolutely awful—"Hell" as one neighbor described it. Stagecoach Road from SW 29th east to Hwy 77 is very hilly, with both steep and rolling hills. Obviously at the top of the hills, it is impossible to see oncoming traffic, be it cars, trucks or tractors. Equally dangerous is trying to stop or veer to the side going down the steep hills. Just this past summer, a car ran off the road trying to avoid an oncoming car at the bottom of a hill and landed upside down in a steep ditch. At about SW 2nd and Stagecoach, the road becomes a dam. Occasionally, vehicles have gone off the edge of the dam. The volume of traffic generated by fourteen additional homes will be readily noticed on Stagecoach Road, negatively impact the quality of life for these residents and creating additional hazards at the top, and the bottom, of the many steep hills and across the dam.

Panama Road

Panama Road is almost as hilly from SW 29th east to Hwy 77 as Stagecoach Road. Panama Road also carries much of the traffic created by the dump trucks operated by Gana Trucking which is located on Panama Road. The intersection at SW 14th and Panama Road is dangerous because traffic on Panama Road, going either direction, is traveling downhill toward the intersection and must stop for a stop sign. I've heard many complaints from neighbors about the amount of traffic on Panama Road that does not stop for the stop signs. The intersection at SW 2nd and Panama Road is near the top of a hill. Vehicles stopping at SW 2nd are unable to see traffic coming from the west on Panama Road. Complaints have been made repeatedly to the County Engineer to no avail. The additional traffic that the additional fourteen homes could create would compete with Gana's heavy trucks for road space, and increase the danger at two already dangerous intersections.

SW 14th

SW 14th Street is heavily traveled and also well used by Gana Trucking. While I would imagine that many neighbors living on SW 14th will notice the additional traffic created, the impact will be much less noticeable than on Panama or Stagecoach Roads.

SW 29th

SW 29th is the preferred road for the Four Stones entrance, if approved, because it is relatively flat from Sprague Road to Panama Road increasing visibility. However, it is a relatively quiet road. Therefore, additional traffic will be noticed.

My biggest concerns are the safety issues on both Stagecoach and Panama Road. How much will the Four Stones residents use those roads? I would guess it to be significant. Yes, north bound traffic could go to the Sprague Road and then to Hwy 77. But vehicles would slow down to go through Sprague. At Hwy 77, they would find a very busy intersection during rush-hour traffic. My own personal experience has shown Stagecoach Road to be a much safer road for getting onto Hwy 77 and it won't take long for "new-comers" to come to the same conclusion. Also, people most generally are inclined to take the closest roads from point A to point B, which in the case of getting to Hwy 77, would be Stagecoach Road.

The Four Stones homes will be in the Norris School district. The school is south and east of the proposed development. It is very conceivable that much of the school traffic will take either Stagecoach or Panama Road to southbound Hwy 77. It concerns me greatly to think of young drivers, in particular, traveling on these two steep roads, one with a dam, and the other with a poorly visible intersection and heavy truck traffic.

As an aside, there is a gravel/sand pit in the same section as the proposed development. While once inactive, it has been activated in recent years and is used by Gana Trucking. I have to wonder if children living at Four Stones would be inclined to explore the gravel pit out of natural childhood curiosity. This may, or may not, be a concern that you need to be aware of.

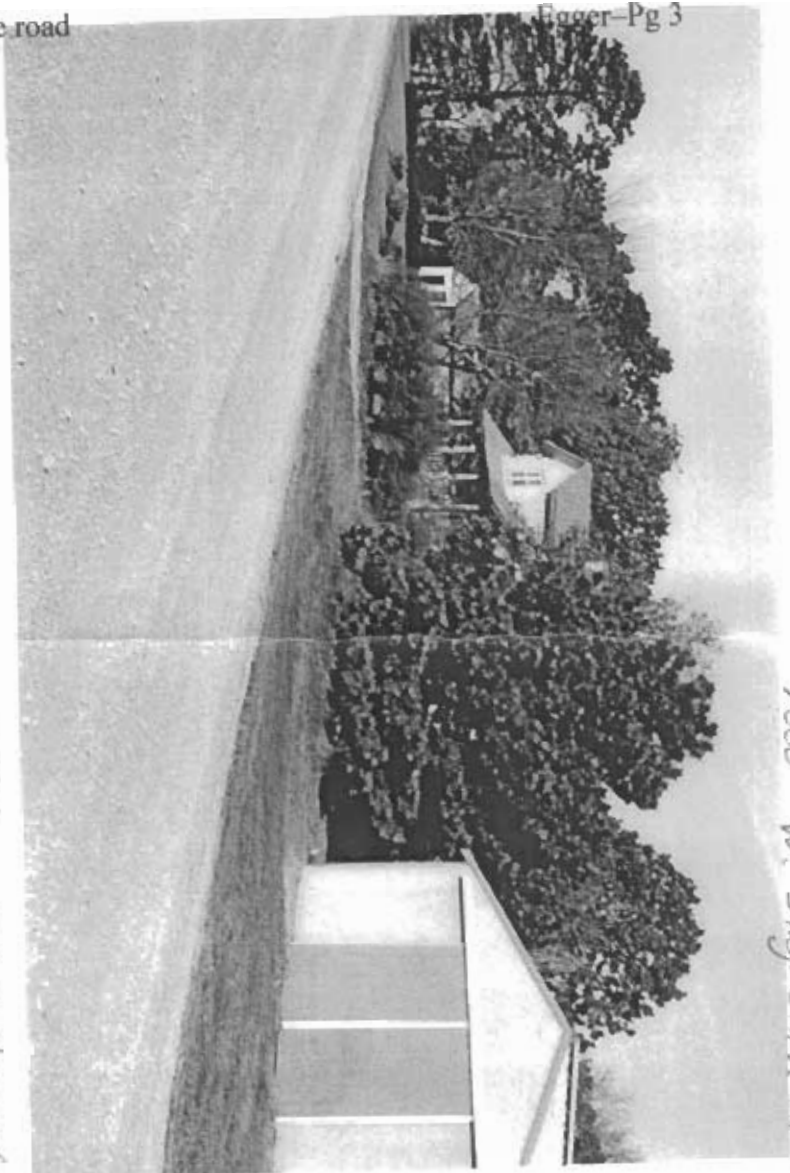
While I admittedly would prefer no development at all, I am also a realist and acknowledge that developments such as Four Stones will eventually be built in our neighborhood. Given this, it is my recommendation that the size of the development be reduced to four or five homes in order to minimize the impact on the safety of Stagecoach and Panama Roads. I hope you will consider this recommendation and the safety issues presented above.

Sincerely,



Valerie Egger

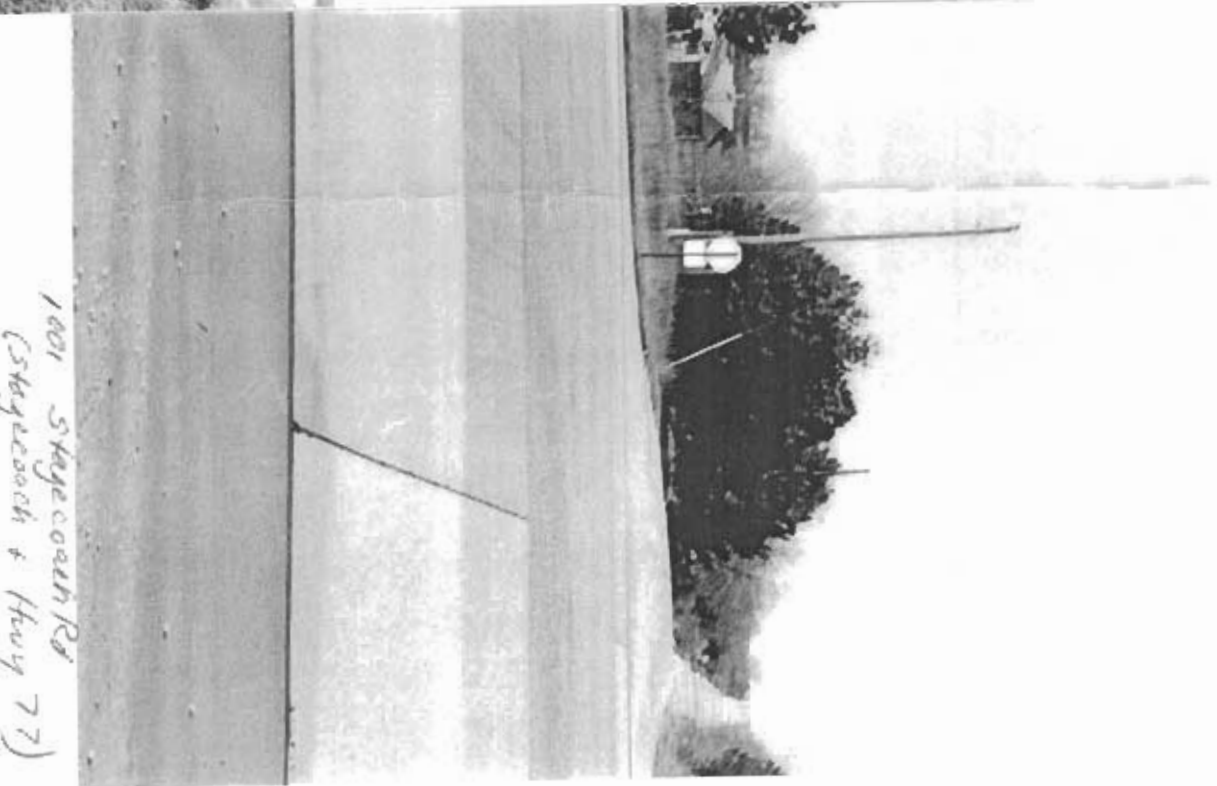
Homes on Stagemoor Road very near to the road



1000 W. Stagemoor Rd



901 W Stagemoor

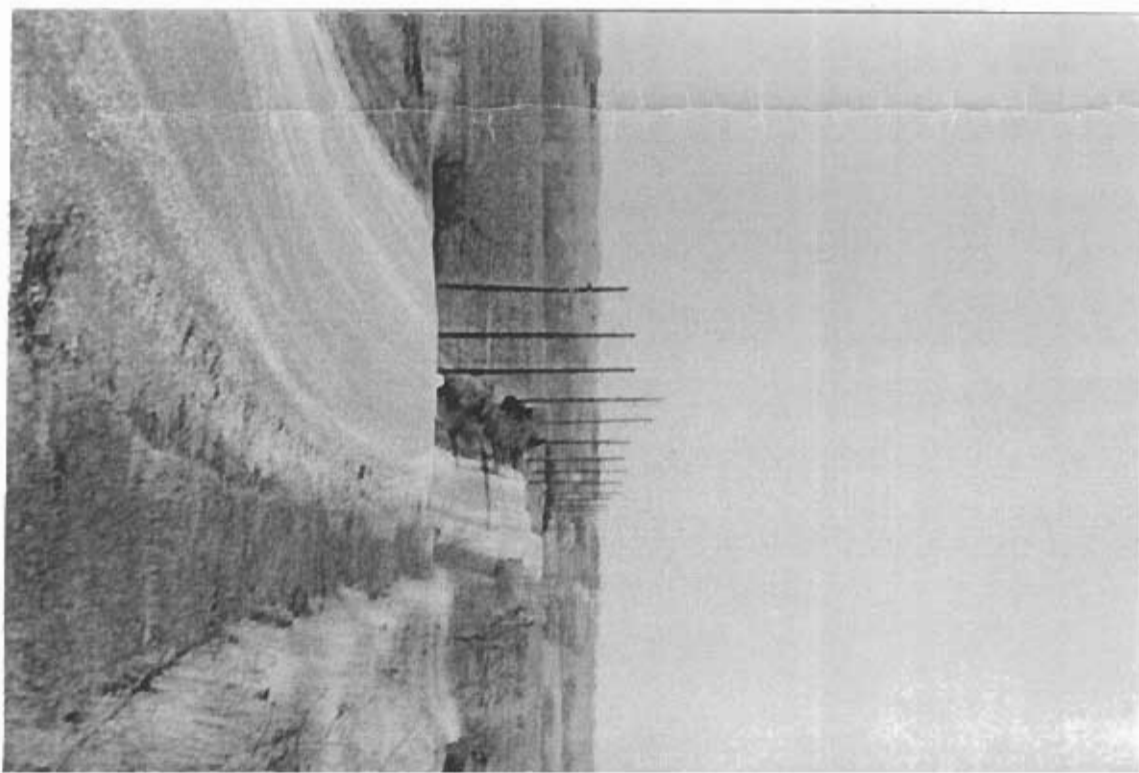


1001 Stagemoor Rd
(Stagemoor + Hwy 77)

Hills and dam on Stagecoach Road



Dam



Gana's Trucking with SE edge of gravel/sand pit (on Panama Road)

from an
hilltop
SW
south of
Panama Rd
(although the photo is
taken from the hillside)



SE edge of
gravel/sand
pit

Gana's Trucking & Excavating
Gana's Landscaping & Light
Repair

IN OPPOSITION

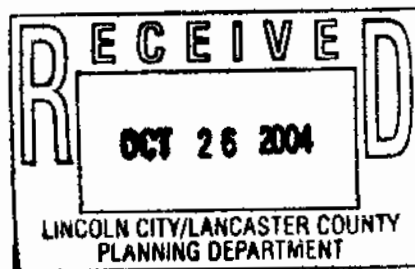
ITEM NO. 3.3a&b: CO. SPECIAL PERMIT 04055
CO. PREL. PLAT 04025

(p.119 - Public Hearing - 10/27/04)

October 25, 2004

City of Lincoln Nebraska
Lincoln Lancaster County Planning Department

RE: County Special Permit #04055
County Preliminary Plat #04025
Four Stones Community Unit Plan
SW 29th Street and Stagecoach Road



TO WHOM IT MAY CONCERN:

I am writing this letter in regard to the above referenced project as well as the letter written to property owners in the adjacent area dated October 15, 2004 explaining the above project.

I am opposed to the county allowing the population base to grow in our area until an existing problem with the county roads is resolved. Specifically, the intersection of SW 2nd and Panama Road. It is an extremely dangerous intersection with zero visibility from the west. Because the proposed 31-family units are in the Norris School District, Panama Road and this intersection would be one of the most direct routes to and from school, causing increased traffic and greatly increasing the possibility of a traffic accident.

This intersection has been reported to the county numerous times, not only by myself, but also other neighbors in the area. Each time in the past when I have had a near accident on this intersection, I have contacted 1) the county engineer, 2) the county commissioner, and 3) the sheriff's department and always receive the same response - - NO ACTION. It appears the county is waiting for a fatality before anything is done.

If this developer can get the county to take care of this dangerous situation, I have no further objections to the development.

Sincerely,

Robert Rahorst
Robert Rahorst
23045 SW 2nd
Martell, NE 68404
Ph: 794-4845

Gregory A. Skene
Gregory A. Skene
705 W. Panama Rd
Martell, Ne. 68404
794-6265

May Steve W.
May Steve W.
905 W. Panama Rd
Martell, Ne. 68404

I am in agreement with the above comments.

Eugene W Eggert
Eugene W Eggert
22505 SW 2nd
Martell, Ne 68404
Ph 794-4375

Margaret A Eggert
Margaret A Eggert
22505 SW 2nd
Martell, Ne 68404
Ph 794-4375

Linda Rahorst
Linda Rahorst
23045 SW 2nd
Martell, NE 68404

Sean Sullivan
Sean Sullivan
23750 SW 2nd
Martell Ne
68404.

Thomas H Sullivan
Thomas H Sullivan
23750 SW 2nd
Martell Ne 68404
798-7372

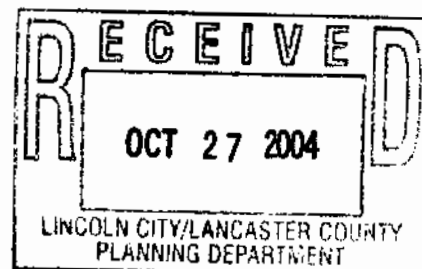
IN OPPOSITION

ITEM NO. 3.3a&b: CO. SPECIAL PERMIT NO. 04055
CO. PREL. PLAT NO. 04025
(p.119 - Public Hearing - 10/27/04)

City-County Planning Commission
c/o Mary F. Bills-Strand, Chair
555 South 10th Street
Suite 213
Lincoln, NE 68508

Joe Lionberger FBO
Beulah Lionberger, et al
Property owner--SW 29th and West Sprague Road
3405 West Sprague Road
Martell, NE 68404

Re: Four Stones Community Unit Plan
Co. Special Permit #04055, Preliminary Plat #04025



I am writing today to voice our opposition to the proposed Four Stones development. We believe that the proposed development is contrary to sound planning practices. The proposed development will saddle neighboring landowners, future town jurisdictions and the county at large with the undue burden of upgrading waived infrastructure and roads that would be deemed unsafe without these improvements. There is no additional benefit to the neighborhood at large to create this proposed development, so it is impossible to justify the increased costs to the county and neighboring landowners for safety and infrastructure upgrades and continued maintenance.

The proposed development would create an urban environment from a neighborhood that is currently thoroughly rural and agricultural. The proposed development is thoroughly unnecessary sprawl that will bring with it the safety and environmental issues that plague other densely populated areas.

The destruction of the entire town of Hallam has brought excess residential lot capacity to the area, and the rebuilding there will stifle demand for new development lots in the vicinity for years to come. The Hallam areas are already zoned for residential development, and as such, should be targeted for use long before new development is allowed unfettered. Other outlying residential developments in the area have floundered do to lack of demand for this type of development as well.

Please consider the following points:

- The 2025 Lincoln/Lancaster County Comprehensive Plan is based on sound planning principles. The 2025 Lincoln/Lancaster County Comprehensive Plan does not show the area associated with this preliminary plat as residential, nor any of the land reasonably nearby. Efficient land use and the desire to limit the negative effects of urban sprawl, tell us that developments are built on the outskirts of existing cities (and infrastructure), not in the middle of farmland where it is neither economical nor safe to create and maintain a dense community.

There is no clear reason to change from the existing (and as shown in the 2025 Plan) zoning.

- The proposed area is outside all Tier growth shown in the 2025 Lincoln/Lancaster County Comprehensive Plan and not within a logical area for expansion for any developed town.
- The developer obviously does not want the development in their own backyards as can be seen by the fact that they have chosen to place the development at the exact opposite, and farthest away, corner of the property from their own residences, but didn't hesitate to place it near their neighbors' homes.
- The preliminary plat is for approximately 520 acres, but there will only be approximately 120 acres developed, in approximately 3.5-acre lots, and one lot of about 14 acres. The majority of the land, 341 acres (Outlot A) will be for continued agricultural purposes. While this may serve the desire of the developer to develop the maximum number of lots and giving up the least amount of their land, it also creates a density that is clearly outside the norm or needs for housing in the area.
- A 20% bonus is being requested in the density calculation for credit towards preservation of farmland and flood plain. It appears that the plans of the developer are to achieve the benefits of the bonus and upon approval of the rezoning there's nothing to deter them from developing the remaining acres that were used to gain said 20% preservation bonus at some time in the future.
- The developer wants items such as street lighting and sidewalks waived to keep with the rural surroundings of the area, while developing so densely as to create an urban appearance. We believe that this flies in the face of sound planning.
- It is not cost effective for the public to pay to support development miles away from existing towns and existing infrastructure and planned improvements.
- The development will increase traffic on a rural gravel roadway necessitating substantial improvements to maintain safety. This area has a large farming population that drives slow moving farm equipment on the roadways around this proposed development. With increased traffic, comes more chance for fatalities and property damage.
- Hallam is currently trying to rebuild and revitalize after the devastating tornado damage. There will be available housing in Hallam that will go to supporting an existing community and revitalizing small town Nebraska, not developers looking to make a profit in the quickest, cheapest way. These residence lots near Hallam will serve the public need for outlying residential lots for years to come.

- When nearby towns do expand, they will become responsible for the cost associated with upgrading the infrastructure to meet urban standards for health and safety, including upgrading roadways, storm-sewer, wastewater and drinking water facilities. The developer is clearly hoping to waive responsibility for this infrastructure at this time only to force nearby communities to clean up the mess in the future. This is effectively saddling adjacent communities with a burden down the road once the developer has made their handsome profits and moved on.

We originally purchased our lands in order to live in an agricultural setting for as long as possible. Due to the 2025 Lincoln/Lancaster County Comprehensive Plan, we have believed that we are not in danger of losing this way of life for some time to come. Should the planning commission approve this proposed development in this otherwise agricultural and rural area, they will be sending a clear message to developers that these developments are welcomed, despite the current overcapacity of these types of lots, the horrible risk/return tradeoffs to the public welfare and public safety, and in spite of surrounding landowners' objections. We believe that this is certainly the wrong message to send to these profiteers.

Thank you for your consideration.



Joe M Lionberger for benefit of the following:

Landowner: Beulah L Lionberger

Interested Parties/Beneficiaries:

John M Lionberger DVM

Anne M Lionberger

Laura L Lionberger

Ruth E Lionberger MA

Jack M Lionberger MD/PhD

Joe M Lionberger

Holly S Lionberger PE

Josh M Lionberger

An additional letter will be submitted between now and the next meeting on this issue by the Planning Commission, which will contain, at a minimum, the above signatures.



"Lorance Newburn"
<lorancen@alltel.net>

11/01/2004 09:10 AM

To: <plan@lincoln.ne.gov>
CC:
Subject: County Special Permit No. 04055, Four Stones Community Unit Plan

Lancaster County Planning Commission:

My name is Lorance Newburn. My wife and I live at 600 West Stagecoach Road, which is about ½ mile east of the intersection of SW 14th St. and Stagecoach Road, which forms the NE corner of this proposed development. My wife and I live on 65 acres of virgin prairie, which we maintain for our enjoyment and the enjoyment of our family and friends.

We are steadfastly opposed to the development of Four Stones, or any rural property in Lancaster County for that matter, for the purpose of housing development. We moved from Lincoln about 18 years ago to escape from neighbors living virtually 10 feet on either side of us. We wanted to have privacy and to improve the quality of our lives. We enjoy the quiet, rural lifestyle and we do not want it disrupted. The development of this property will lead to the destruction of what we currently enjoy by opening the door for more development within our area. Rural Lancaster County must be kept rural. All of my neighbors have expressed the same sentiment and are also opposed to this development. I think that it is important that the City of Lincoln and Lancaster County do not allow the patchwork development of rural property because this will only lead to problems for future development.

High-density development of this property will increase the traffic on all roads leading to it. This summer, the bridge just east of Sprague was replaced. This caused an increased traffic load on Stagecoach Road, which created a safety hazard for those of us living on it, and we couldn't leave our windows open because of the dust. We don't need more traffic in the area. Any argument that most people will use SW 14th and SW 29th from Sprague Road to access this property just doesn't hold water. Most traffic to access this property will be over Stagecoach Road to/from Highway 77.

At the very minimum, if this property is approved for development, Stagecoach Road, SW 14th and SW 29th must be paved by the developer.

Respectfully Submitted,

Lorance & Roberta Newburn



Martin Gaskell
<gaskell@unlserve.unl
.edu>

02/14/2005 05:50 PM

To: JWalker@ci.lincoln.ne.us
cc: MKrout@ci.lincoln.ne.us, RHill@ci.lincoln.ne.us,
MDekalb@ci.lincoln.ne.us
Subject: County Special Permit No 04055 and Preliminary Plat No. 04025

Hi Jean,

thanks for the prompt reply on the new lighting standards proposal. I hope to be present in person at Wednesday's public hearing.

On a closely-related item on Wednesday's agenda, one of my former UNL students has just drawn my attention to a problem with agenda item 4.1a (County Special Permit No. 04055) and 4.1b (County Preliminary Plat No. 04025) (Four Stones Community Unit Plan). The thing of concern to me here is the request for a waiver for "ornamental lighting". I understand that such requests come up quite often.

I would urge the Commission not to approve this, or any other request by a developer for an ornamental lighting waiver for several reasons:

(1) In this particular planning request, the lighting request is vague and details are not given in the body of the document. We do not know the number, luminance, and type of fixtures being proposed.

(2) It is especially important in a rural development like the proposed Four Stones Community to avoid light pollution and light trespass. People in a development like this have a lot to lose. They are probably choosing to live in such a development because they want a more rural environment outside the city. Part of the beauty of rural living is being able to enjoy the dark sky. Residents are therefore expecting a lack of outdoor lighting. Almost all common so-called "ornamental" lighting gives significant glare which immediately spoils night vision, and it usually makes a significant contribution to light pollution. A rural dark sky is particularly easy to destroy.

(3) Glare and light pollution from bad lighting in a rural development can affect the quality of life of residents far from the development itself, up to a mile or more away.

I would urge the Commission to insist that any lighting put in, whether of streets, paths, or around houses, should be fully-shielded, full-cutoff.

It should be noted that there is no need for a high level of illumination in rural settings, or even for any illumination at all (e.g., rural highways do not have street lights).

In the various developments I see around Lincoln a variety of approaches are taken to lighting. From a glare and light pollution point of view, some are very bad and some are quite good. I believe that the type of lighting probably has no affect on the property values. Bad lighting is probably mostly the result of ignorance by the architects and developers. I believe that if the Planning Commission insists on not having "bad" lighting this will not cause problems for developers or future residents.

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